

THE 2019 VERBAL AUTOPSY AND SOCIAL AUTOPSY STUDY TO DETERMINE CAUSES AND DETERMINANTS OF DEATHS OF NEONATES AND CHILDREN UNDER-FIVE YEARS OF AGE IN NIGERIA

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National Population Commission
Federal Ministry of Health
USAID/CIRCLE Project



STUDY IMPLEMENTATION

The 2019 Verbal and Social Autopsy (VASA) study was implemented by the National Population Commission in collaboration with the Federal Ministry of Health. The funding for the 2019 VASA was provided by the United States Agency for International Development (USAID) through the Coordinating Implementation Research to Communicate Learning and Evidence (CIRCLE) Project led by Social Solutions International who also provided technical support.



BACKGROUND

INTRODUCTION

- Under-five mortality in Nigeria has declined from 201 per 1,000 live births in 2003 to 132 per 1,000 live births in 2018, a 35% decline in 15 years.
- Most of this decline occurred in children 1 to 59 months of age with a smaller decline in neonatal mortality.
- However, the decline is much lower than what is needed to achieve the Sustainable Development Goal (SDG) 3 target of reducing underfive mortality to 25 deaths per 1,000 live births by 2030.



NIGERIA HAS THE WORLD'S HIGHEST CHILD MORTALITY

In a 2020 UN report on child mortality, Nigeria has the highest number of deaths in children under-five.



858,000
deaths per year



117 per
1,000 live births

Nigeria has improved, but other countries have improved faster.

United Nations Inter-agency Group for Child Mortality Estimation (UN-IGME), 'Levels & Trends in Child Mortality: Report 2020, Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation', United Nations Children's Fund, New York, 2020. (Note – Figures for all countries are modeled estimates based on all available data and so are not exactly the same as the in the DHS surveys).



NIGERIA MORTALITY RATES

Trends in early childhood mortality rates

Deaths per 1,000 live births in the 5-year period before the survey.

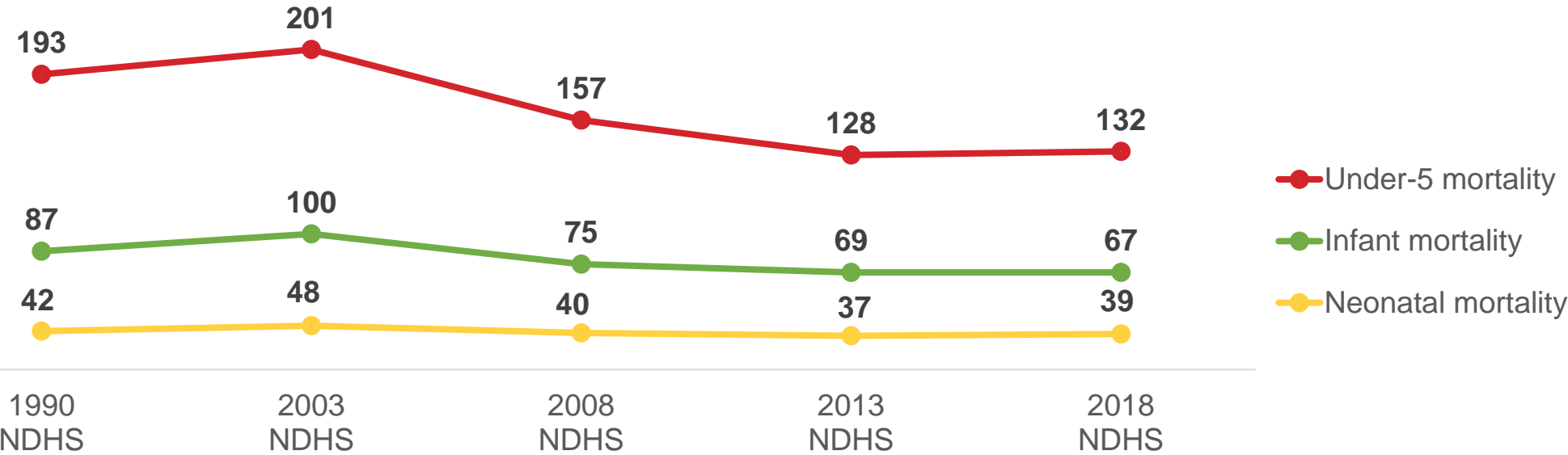


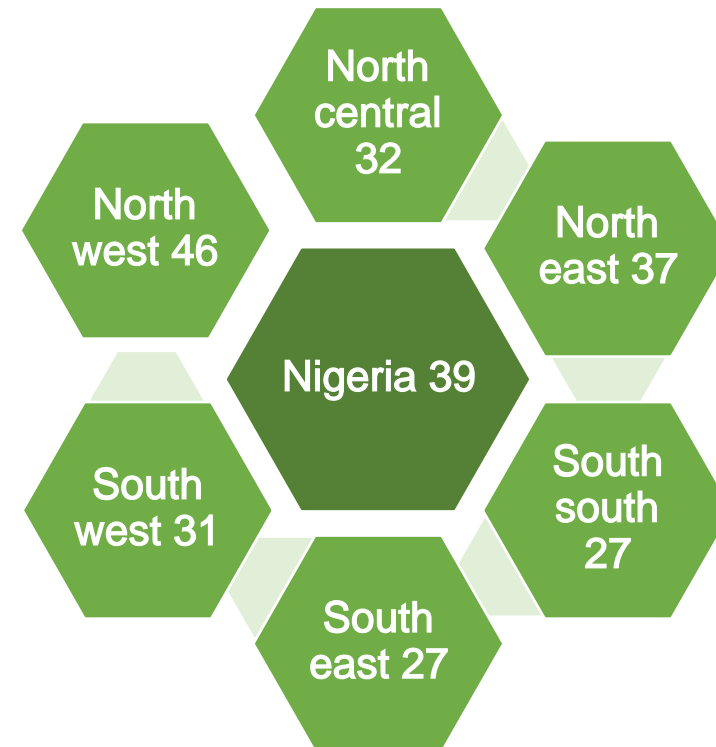
Figure is from NDHS 2018.



DEATH RATES IN NEONATES BY ZONE

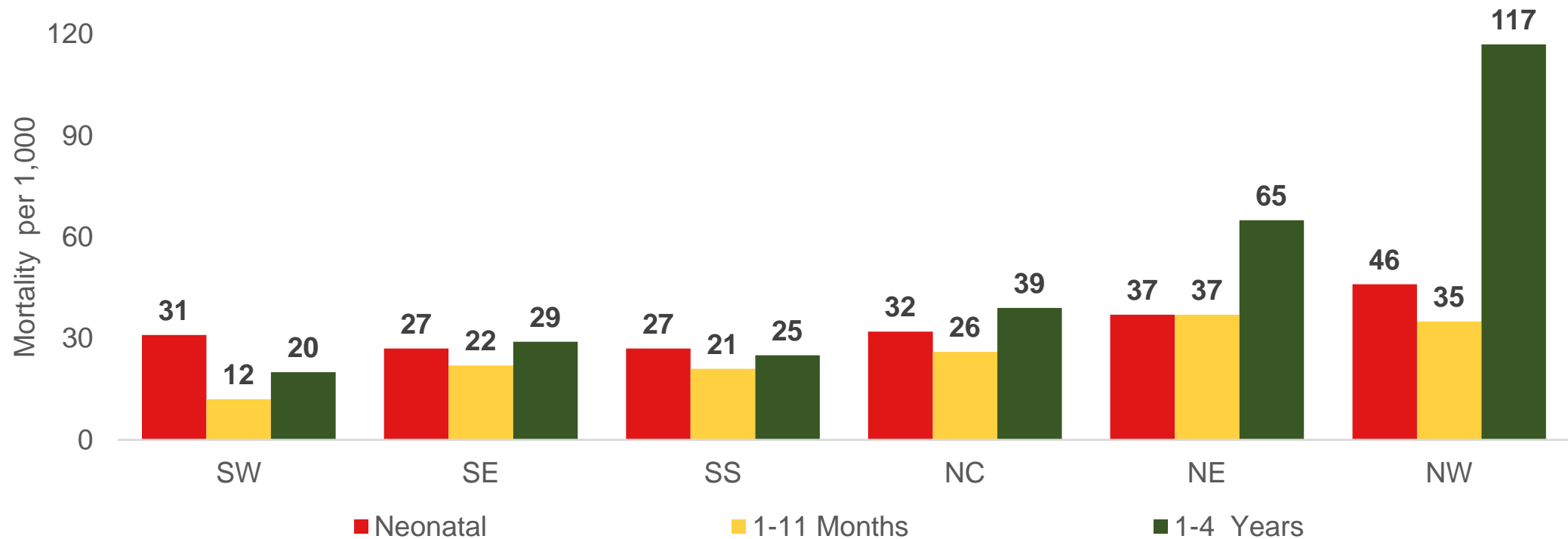
At 39 per 1000 live births neonatal mortality in Nigeria remains far from the SDG target of 12 per 1000 and the average of 27 for Africa.

Even Nigeria's lowest mortality zones only reach the average for the rest of Africa.



DEATH RATES IN CHILDREN BY ZONE

Neonatal, 1-11 months and 1-4 years mortality by geopolitical zone– DHS 2018



VASA STUDY DESIGN

OBJECTIVES OF STUDY

The objectives of the 2019 VASA were to provide National and Zonal level:

- estimates of the major causes of under-five mortality in Nigeria in the 2013-2018 period.
- data on patterns of care-seeking, social factors, and interventions related to deaths in children under-five, along with qualitative narratives of factors associated with these patterns.
- analysis and insights into the causes and social determinants of death among children to enable policy makers to make evidence-based decisions and to inform programmes to best improve health outcomes among under-five children.



WHAT IS VERBAL AND SOCIAL AUTOPSY (VASA)?

Verbal Autopsies

- ask caregivers about the symptoms around the time of death and use various methods to assign probable causes of death.

Social Autopsies

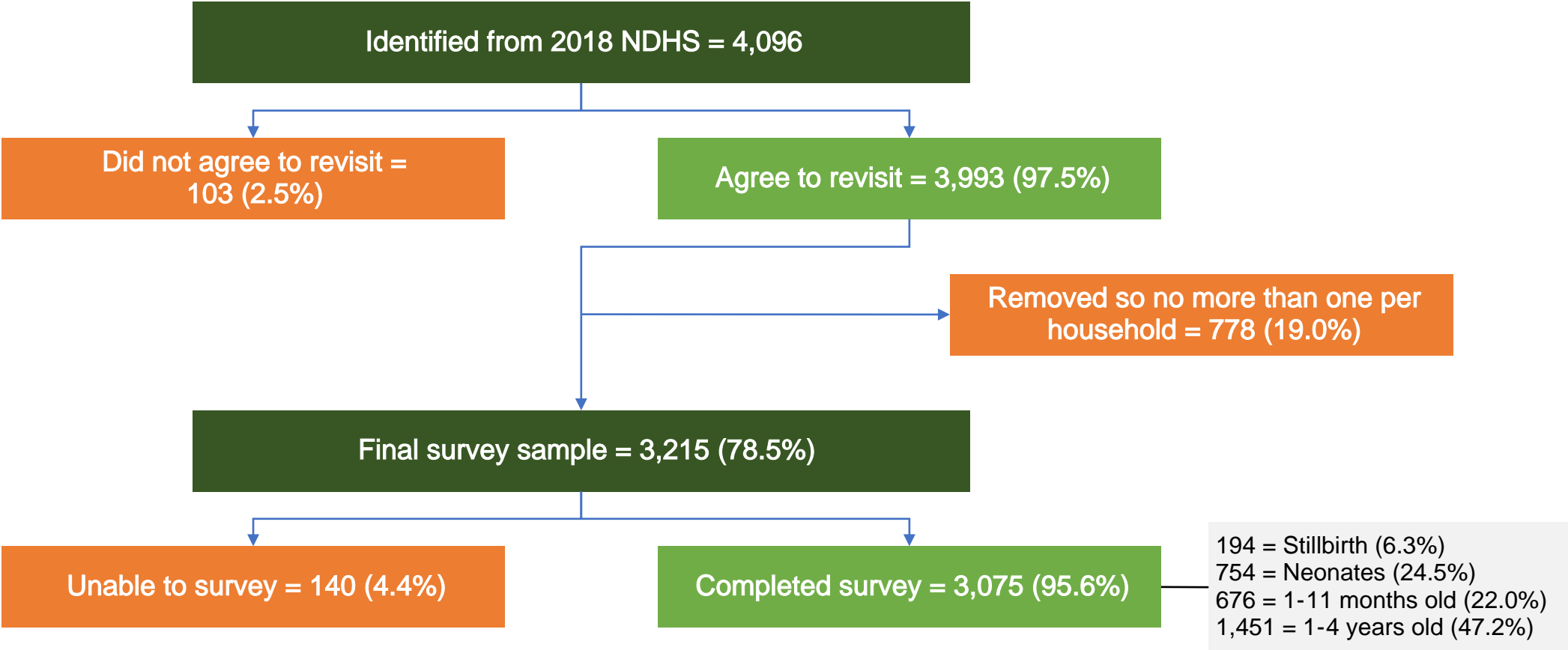
- ask the same caregivers about the sequence of care for the child before death and about various factors that may have contributed to the death.

Qualitative component

- added to the 2019 Nigerian VASA to provide more in-depth understanding of social and contextual factors related to child deaths.



SAMPLE SIZE AND SURVEY COMPLETION



VASA SURVEY COMPONENT

The survey instrument consisted of 15 modules covering verbal and social autopsy topics

Modules for all deaths	Modules specific for neonatal deaths	Modules specific for 1-59 month old deaths
<ul style="list-style-type: none">▪ General information for all deaths▪ History of injuries/accidents for all deaths▪ Care-seeking during the fatal illness for neonates and child deaths▪ Medical records and mother's HIV status▪ Social capital	<ul style="list-style-type: none">▪ Validation of neonatal death versus stillbirth status▪ Health history for neonates▪ Signs and symptoms for neonates▪ Pregnancy, labour and delivery history for neonates and stillbirths▪ Newborn routine care	<ul style="list-style-type: none">▪ Health history for 1-59 month old children▪ Medical history for 1-59 month old children▪ Signs and symptoms for 1-59 month old children▪ Routine care for 1-59 month old children



VERBAL AUTOPSY METHODS USED FOR QUANTITATIVE ANALYSIS

PCVA (Physician coding verbal autopsy)

Two in-country physicians used a standard WHO set of diagnostic criteria to separately ascribe the cause of death (primary, underlying and contributing) for each case. They then compared notes and reached a consensus on the primary cause of death. A third, independent pediatrician further reviewed the submission to ensure the minimum criteria with clinical acumen were used.

EAVA (Expert Algorithm Verbal Autopsy)

Computerized coding of a set of causes of death was based on answers to survey questions in line with ICD 10 principles. Causes with the clearest symptoms are placed high in the hierarchy. Once a death meets the criteria for one diagnosis, those further down the hierarchy are not considered. Diagnoses not on the list are not included and deaths not meeting any criteria are “unspecified”.



QUALITATIVE COMPONENT

Qualitative data gathering was done in 12 states in all six geopolitical zones, choosing the highest mortality areas.

69

In-depth Interviews



Caregivers

24

Key informant interviews



Healthcare providers

12

Observations



Health facilities

48

Focus group discussions

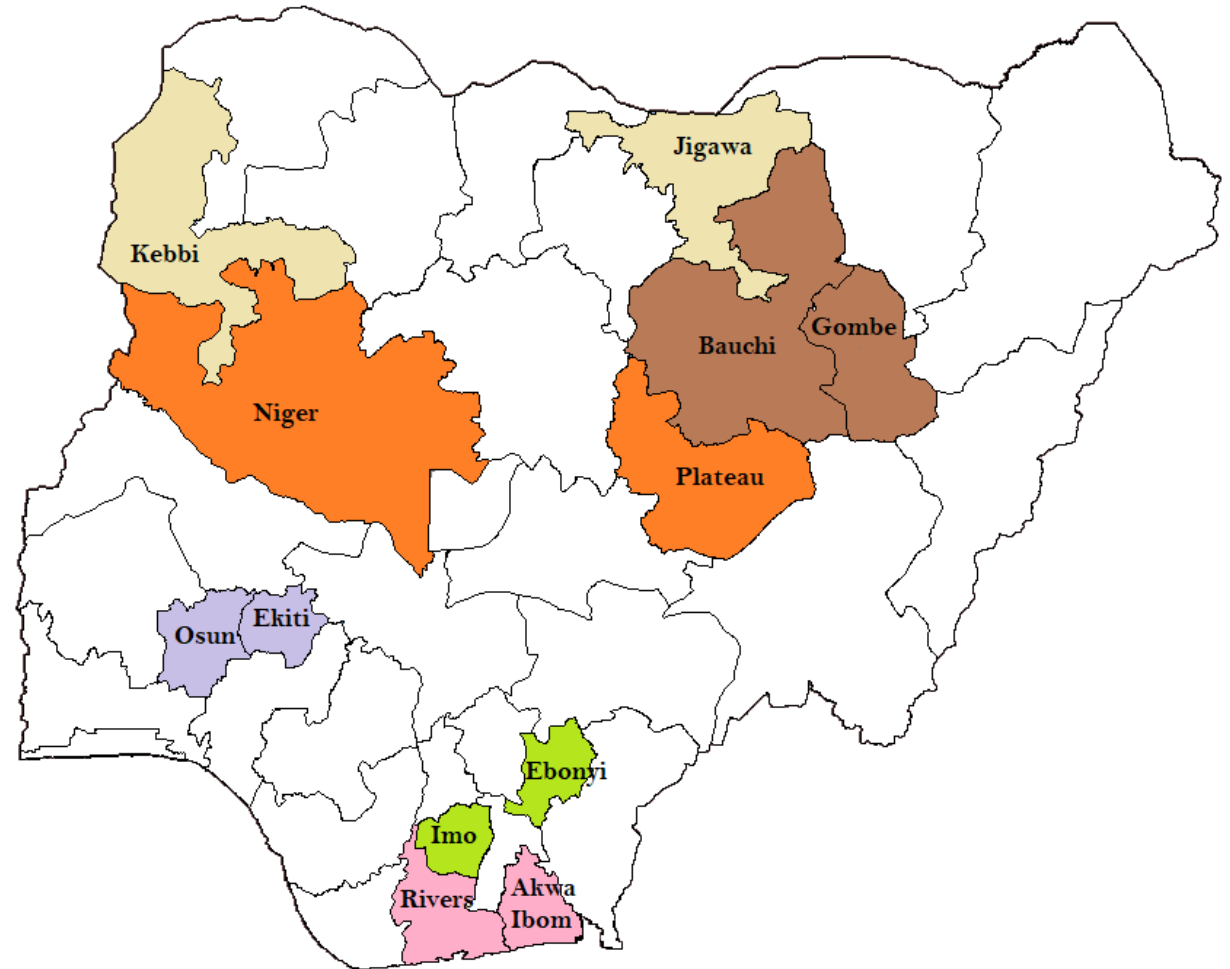


Community members



QUALITATIVE ANALYSIS

- Pseudonyms used
- NVivo version 12 used to create themes and sub-themes in coding transcripts



Selected states for 2019 VASA (Qualitative Component)



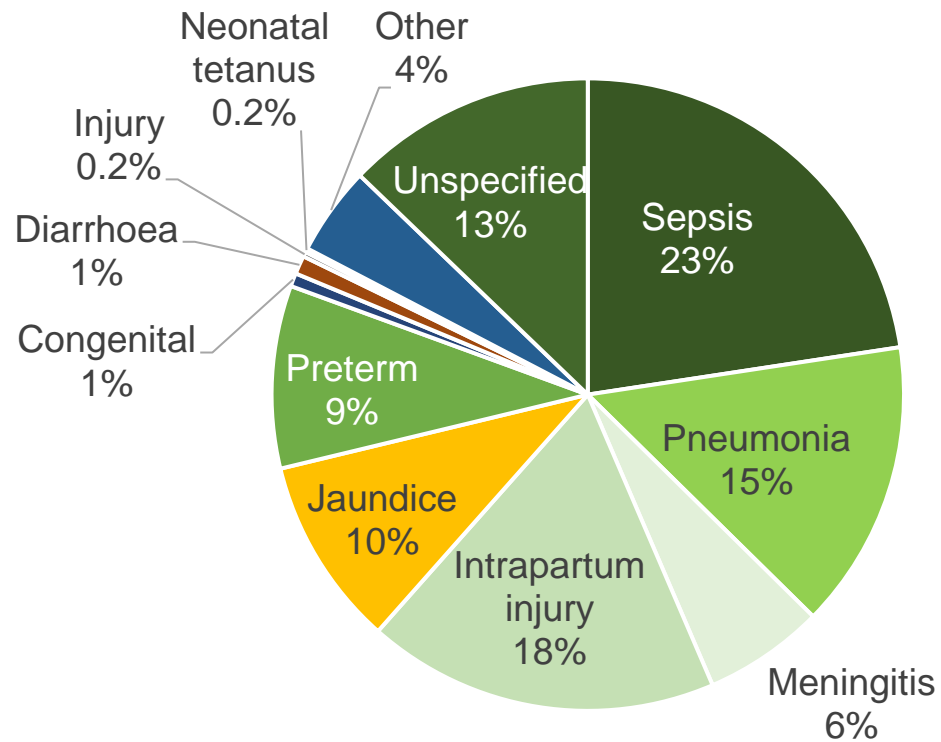
RESULTS

Quantitative Component

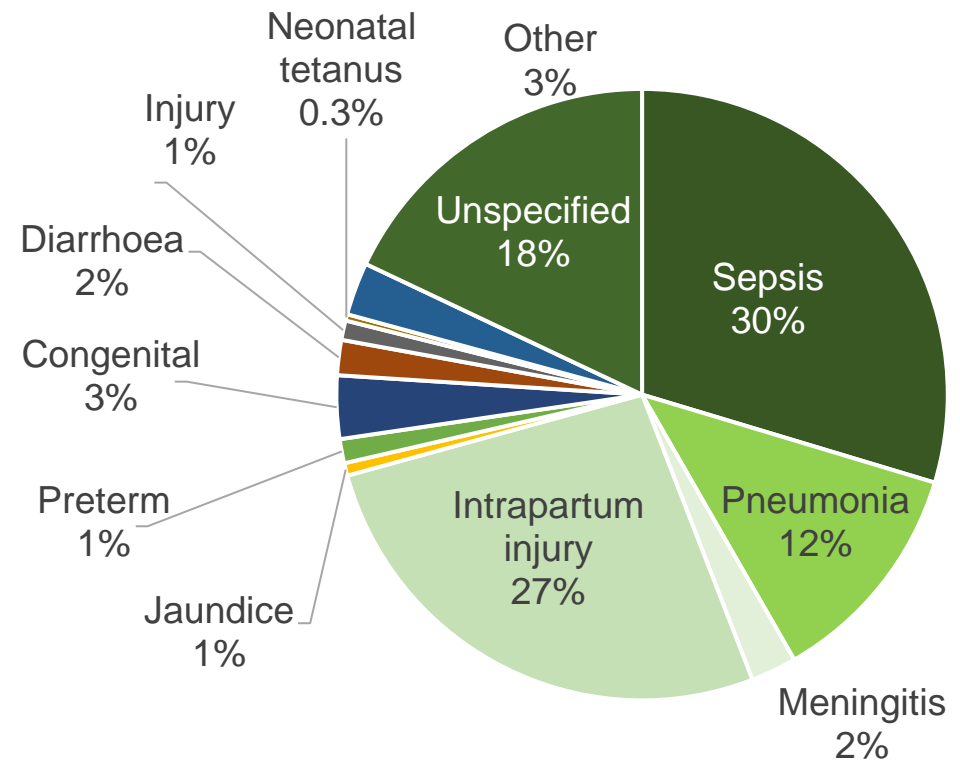
MAIN NEONATAL CAUSES OF DEATH

Physician-coded and Expert algorithm verbal autopsy for causes of 722 neonatal (0-27 days) deaths in Nigeria, 2013-2018 (weighted data)

Physician-coded VA – Neonatal



Expert algorithm VA – Neonatal



MAIN NEONATAL CAUSES OF DEATH

Severe bacterial infections

- Sepsis, pneumonia and meningitis can be combined into “Severe bacterial infections” in neonates since they are similar clinically and in management. These are the largest cause of death (44% by both PCVA and EAVA).

Intrapartum injury

- formerly called Birth asphyxia/trauma. It is the second largest cause of death in newborns (18 -27%).

These two causes were also major diagnoses in the 2014 VASA and in global models of cause of death for Nigeria (WHO Childhood causes of death and IHME Global Burden of Disease study).



OTHER CAUSES OF NEONATAL DEATH

Pre-term birth

- VASA 2019 shows a 9% contribution with Physician coded VA. Expert Algorithm considers it as an underlying cause so it assigns only 1% to prematurity. Global models also show prematurity as very important cause of all neonatal deaths (about 20-30%).
- On the whole, prematurity is still an important cause of death.

Jaundice

- is a common symptom in newborns. The Expert Algorithm treats it mostly as an underlying cause while the Physicians often decided it was a primary cause of death.

All other neonatal causes of death are relatively small. Many neonates did not have clear symptoms in the VASA and their deaths are “unspecified”.



STILLBIRTHS

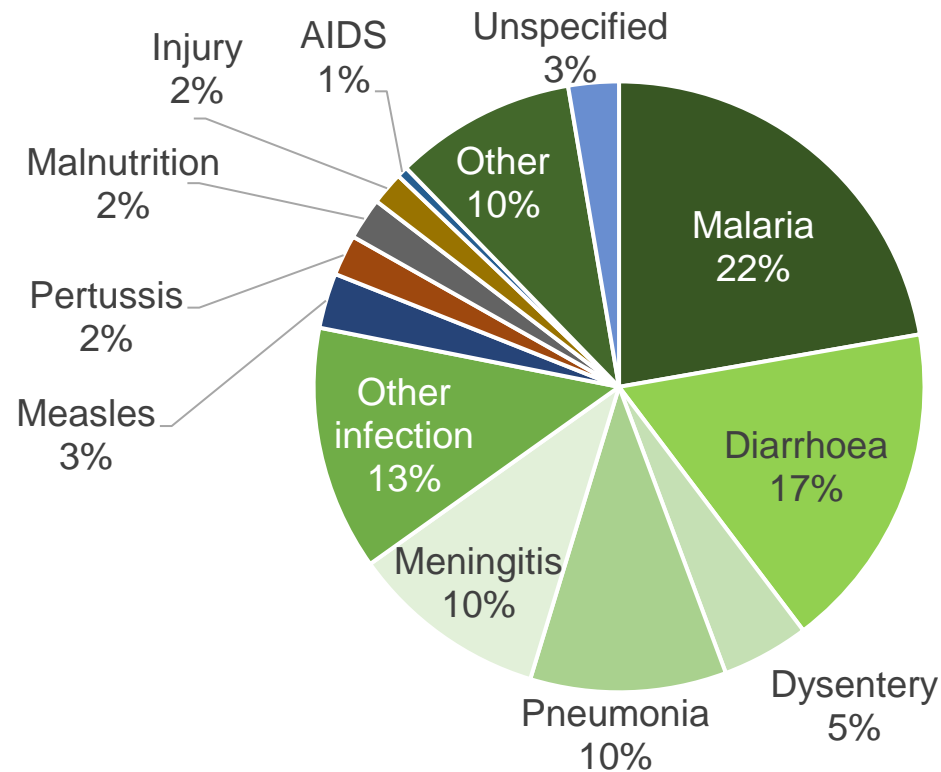
- In both the 2019 and 2014 VASA, many deaths recorded as neonatal in the Demographic and Health survey were found to be stillbirths on further questioning (24% of cases in 2019 and 18% in 2014).
- In the 2019 VASA, stillbirths show patterns of high rates of maternal complications in pregnancy and delivery, similar to neonates who died in the first week, and might be similar to “intrapartum injury” cases.
- Experience in other countries shows that most stillbirths are preventable.



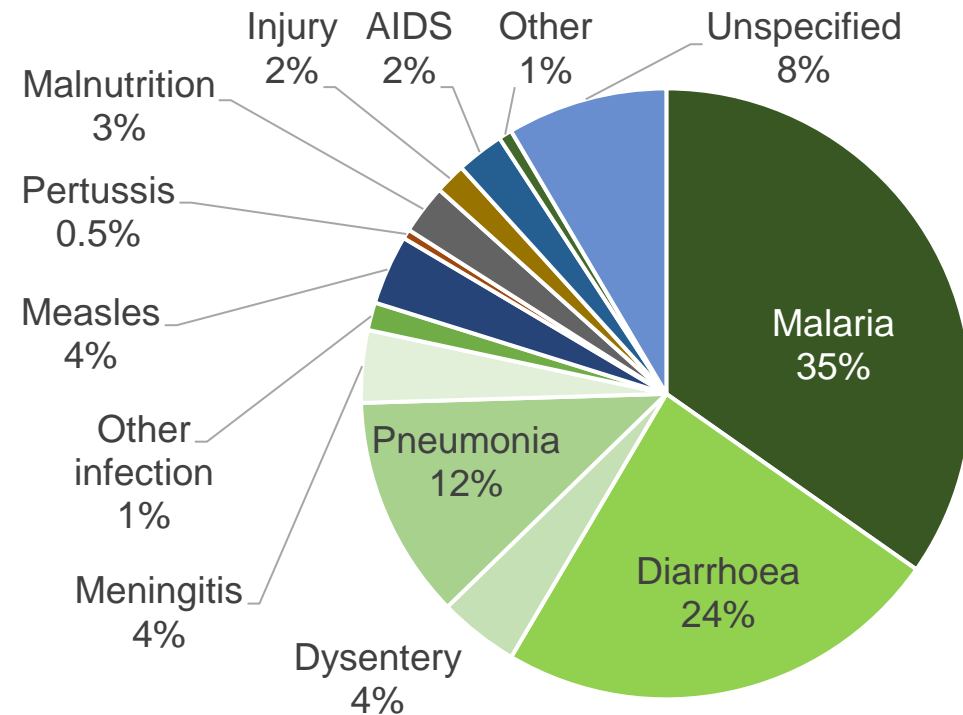
MAIN CAUSES OF CHILD DEATH 1-59 MONTHS

Physician-coded and Expert algorithm verbal autopsy for underlying causes of 2,127 child (1-59 months) deaths in Nigeria, 2013-2018 (weighted data)

Physician-coded VA – 1-59 months child



Expert algorithm VA – 1-59 months child



MAIN CAUSES OF CHILD DEATH 15-59 MONTHS

Malaria

- the number one cause of death in this age group (22% -35%) by the two verbal autopsy methods.

Diarrhea

- in second most common cause (17% -22%) and appears to be particularly common in northern Nigeria.

Pneumonia

- the third most common cause (10% -12%) although in the physician coded verbal autopsy it is tied with meningitis.



OTHER CAUSES OF CHILD DEATH-59 MONTHS

Vaccine preventable diseases

- Measles (3%-4%) and pertussis (0.5% -2%) are entirely vaccine preventable as are some causes of pneumonia and meningitis. Even part of diarrhea deaths are preventable if rotavirus vaccine is introduced in Nigeria. Together these make up substantial portion of all deaths.

Malnutrition

- is not a common primary cause of death but symptoms are common in the VASA study and WHO estimates 45% of under -five deaths have underlying malnutrition as a factor.

Many other conditions are less common, including both other infections and several non-infectious causes (e.g. injuries, sickle cell disease).



ANTENATAL CARE AND PREGNANCY COMPLICATIONS

Antenatal care coverage

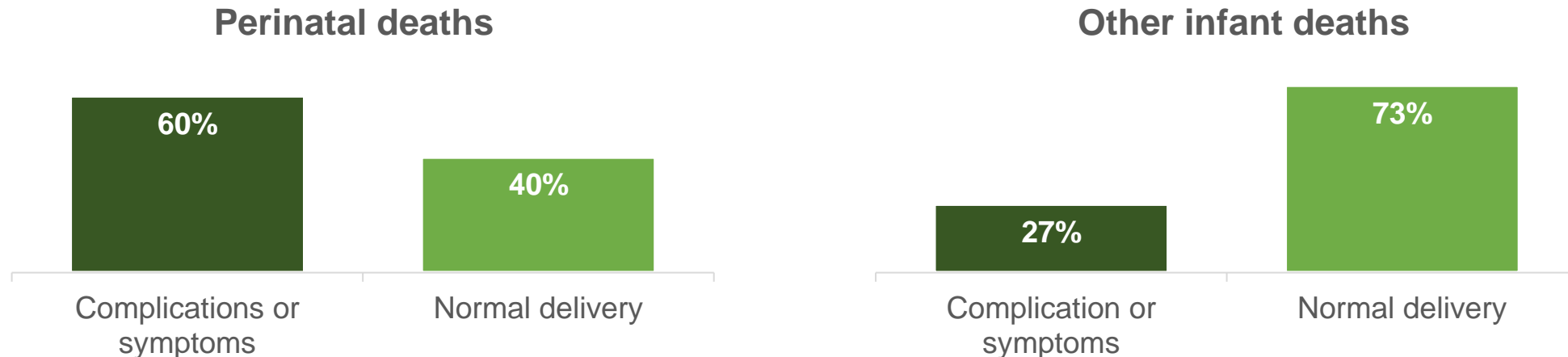
- Coverage of antenatal care for women with a neonatal death was about the same as for other women in the NDHS.
- 50-60% of women with a perinatal death reported a complication or symptom in pregnancy compared to 37 -48% with later deaths.

In summary, symptoms are common in pregnancy, especially for women with a perinatal death. Some women who do not attend ANC seek care due to symptoms, but most do not.



LABOUR & DELIVERY COMPLICATIONS AND PERINATAL DEATHS

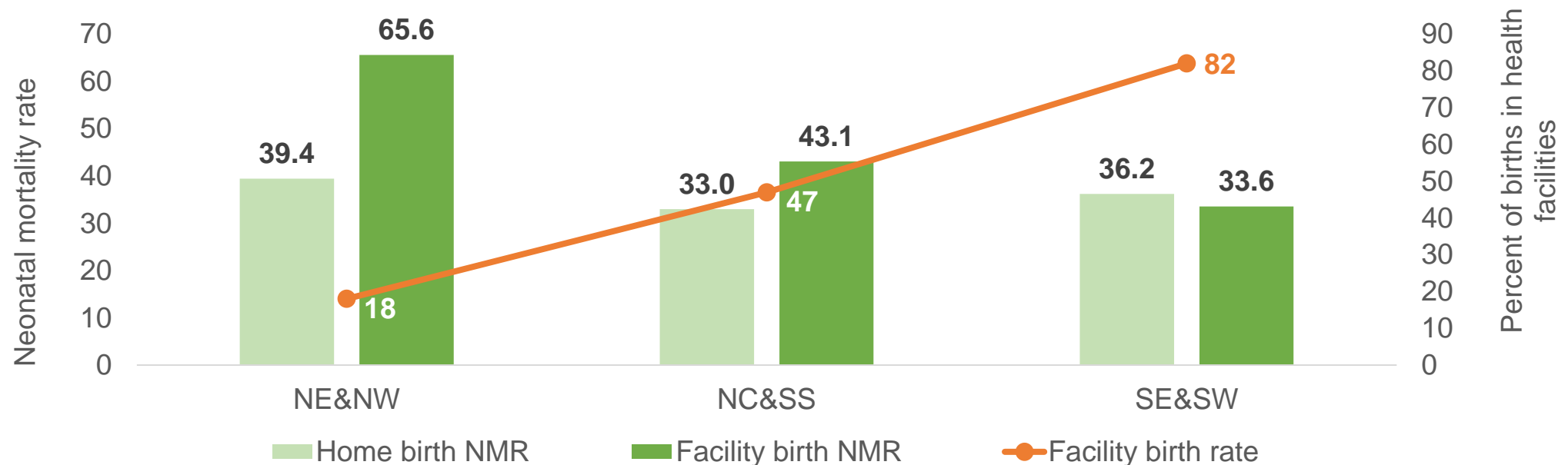
Complications or other symptoms in labour and delivery among women with perinatal deaths (stillbirths or first week of life).



Most perinatal deaths are associated with complications and symptoms in labour and delivery. Interventions to prevent these deaths need to start with the mother and continue with the newborn.

FACILITY VERSUS HOME BIRTHS AND NEONATAL MORTALITY (NDHS 2018)

Neonatal mortality rates for facility births are/could be higher than home births because many women with complications go to facilities for delivery. Zones that have the lowest overall facility delivery rate may have the highest rate of highrisk deliveries in facility.



WHO DECIDES ON PLACE OF DELIVERY?

Women often do not decide for themselves. Who decides varies greatly by zone.

	Mother	Husband	Other family	Other	Cases
Zone	%	%	%	%	No.
NC	33	52	5	10	175
NE	57	35	4	4	225
NW	59	26	7	8	330
SE	85	11	0	4	81
SS	75	18	0	7	57
SW	64	28	3	6	80
Total	57	31	5	7	948



CONCERNS WOMEN HAD RELATED TO LABOUR AND DELIVERY

Distance, costs, transport and going at night were the most common concerns.

	Distance	Transport	Costs of care	Need to obtain permission	Going when late at night	Quality of care in facility	Health worker attitudes	Only male providers in facility	Not sick enough	Others	Any concern expressed	Number
Zone	%	%	%	%	%	%	%	%	%	%	%	#
NC	18	14	22	4	8	3	3	1	4	1	37	175
NE	27	16	16	4	16	1	3	1	4	1	48	225
NW	17	4	12	6	8	0	2	1	6	5	38	330
SE	19	7	17	0	5	12	3	1	1	0	38	81
SS	5	5	11	2	4	2	4	0	0	2	21	57
SW	6	6	20	1	10	13	8	0	1	1	38	80
Total	18	9	16	4	10	3	3	1	4	2	39	948



ESSENTIAL NEWBORN CARE

Care of VASA neonates shows gaps in good care practices.

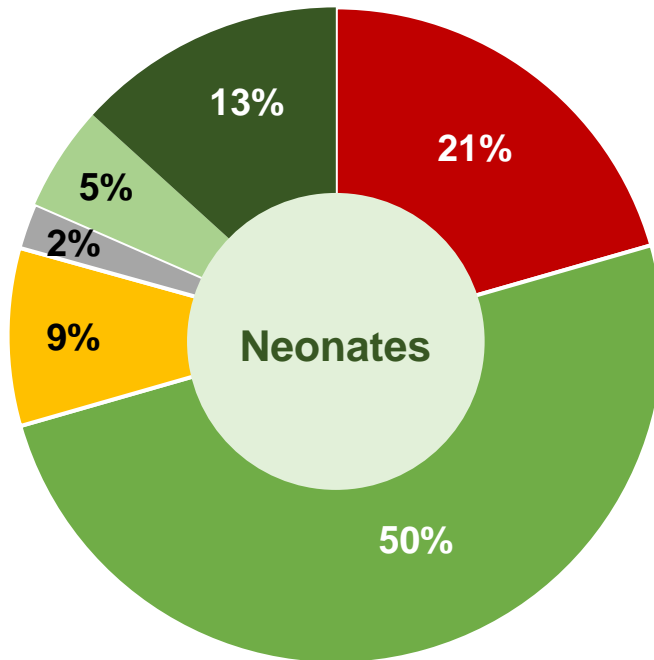
	Immediately placed on chest	Skin to skin contact	Wiped dry within a few minutes	If ever bathed delayed 24 hours	If ever fed, only given breastmilk	Chlorhexidine cord care	Number of cases
Zone	%	%	%	%	%	%	No.
NC	10	9	61	2	85	36	116
NE	17	16	82	5	80	10	192
NW	17	15	74	3	74	13	296
SE	7	5	80	17	77	18	60
SS	15	4	67	11	83	15	52
SW	26	26	90	35	65	32	38
Total	15	13	75	6	78	18	754



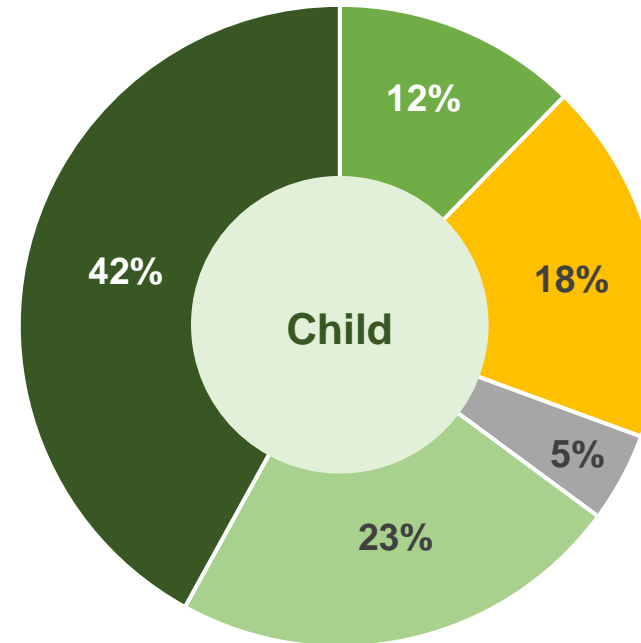
WHERE DO NIGERIAN CHILDREN DIE?

Two-thirds of Nigerian neonatal deaths who are sick at home receive no care before death.

Neonates (n = 754)



Child (1-59 months) (n = 2,127)



Unlike neonates, only 12% of children 1-59 months died without care sought or received for them. 88% of families sought care.

- In birth facility (before discharge)
- At home – no care sought or given
- At home – only informal care given
- On way to a health provider
- At a health provider
- At home after seeing health provider

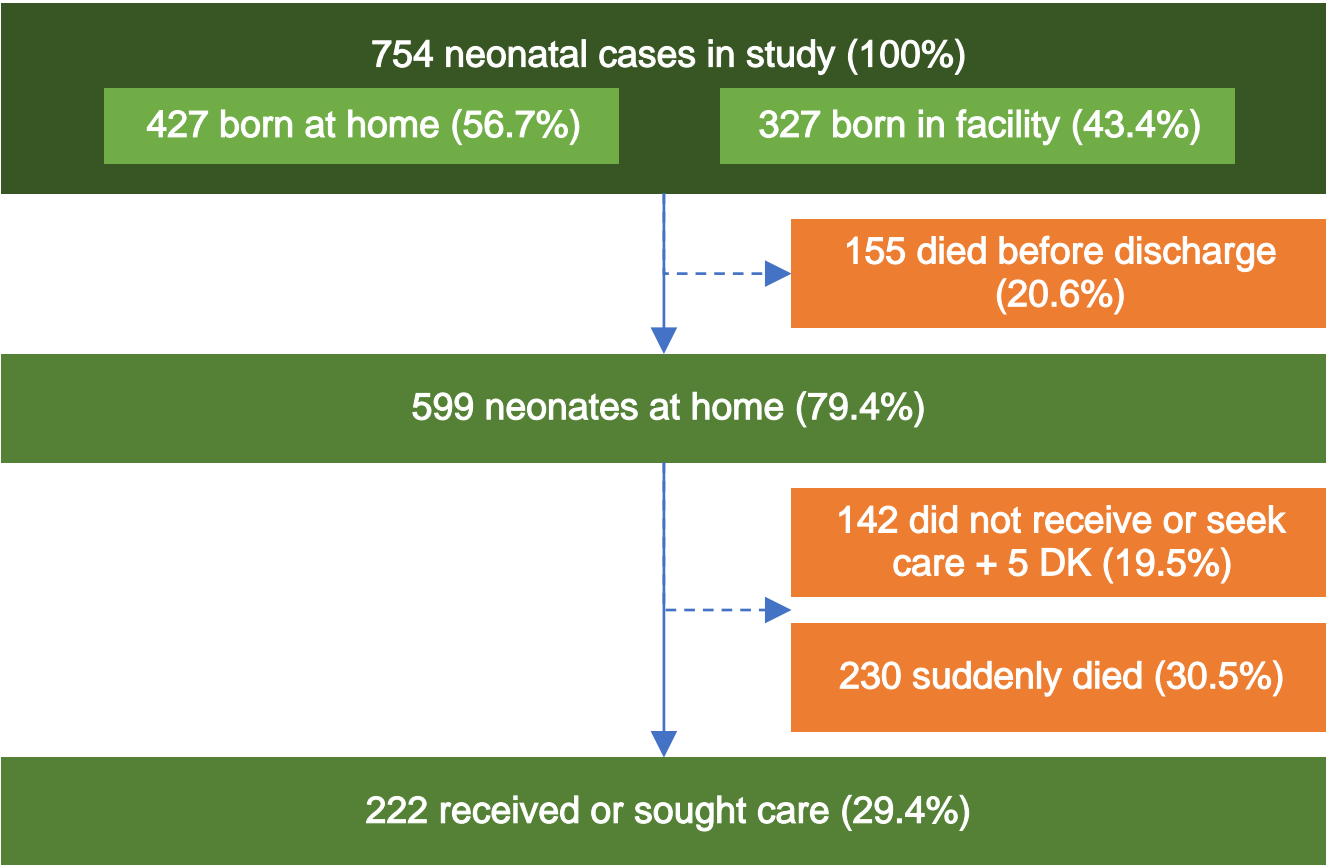


INITIAL CARE FOR NEONATAL DEATHS

Almost half of neonates who die in Nigeria were born in a facility.

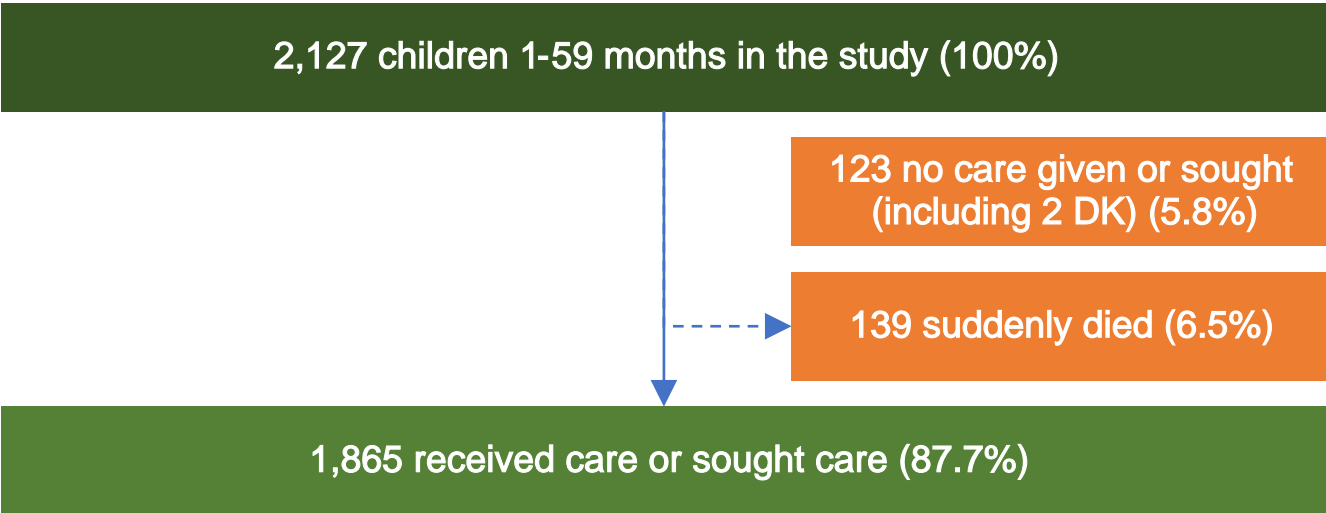
20% of all Nigerian neonatal deaths are in the birth facility near time of birth.

Two-thirds of Nigerian neonatal deaths who are sick at home receive no care before death.



INITIAL CARE FOR 159 MONTH DEATHS

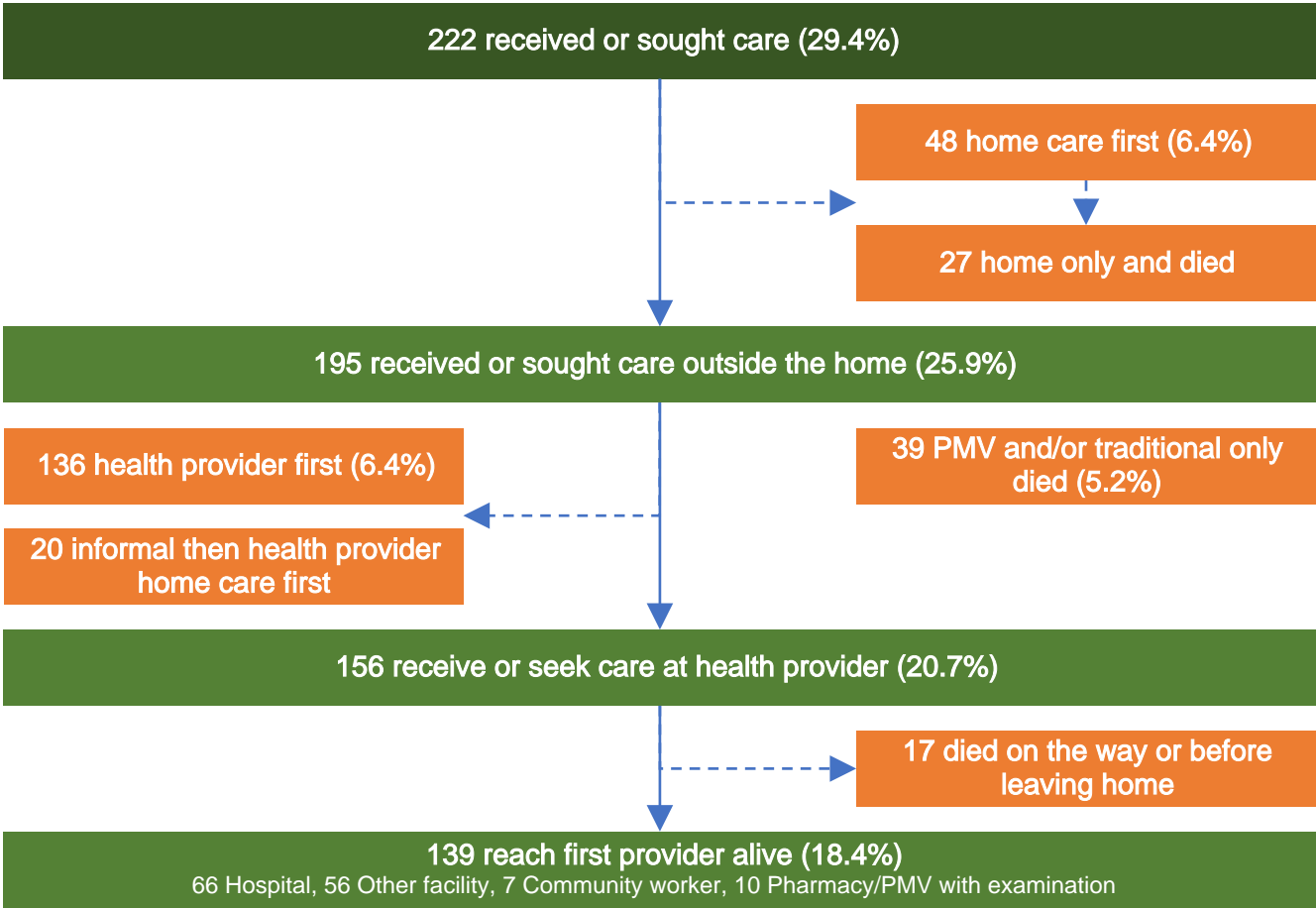
Unlike neonates, only 12% of children 1-59 months died without care sought or received for them. 88% of families sought care.



SEEKING CARE FOR NEONATES WHO DIE

Even when formal care for neonates sick at home is sought, only two thirds ever make it to a health provider. That is, 29% of total cases sought care but only 18% reached a formal health provider.

Others only receive home care or informal care from PMVs or traditional healers.

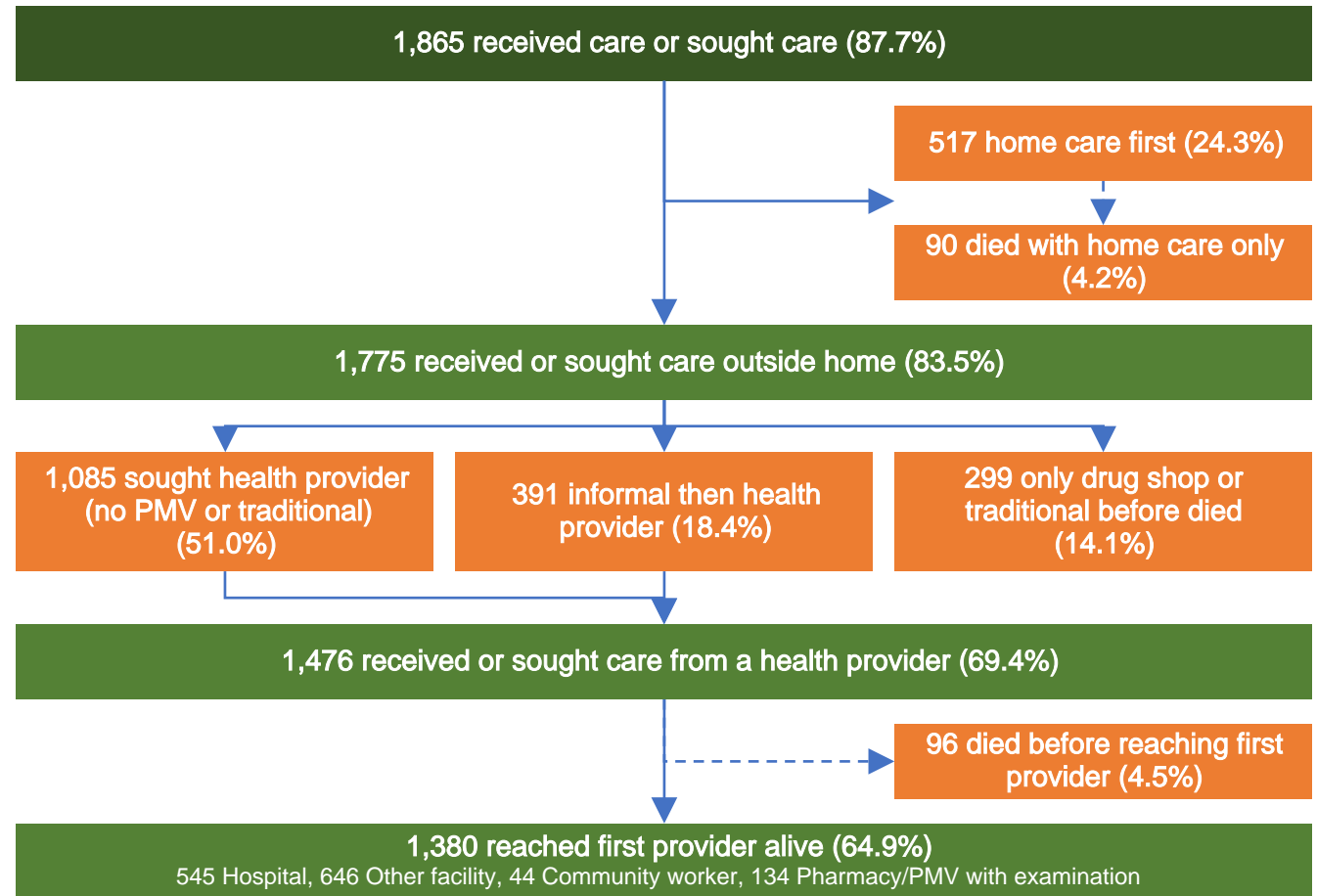


INFORMAL CARE FOR CHILDREN 1-59 MONTHS WHO DIE

Over half of children 1-59 months with fatal illnesses receive a mix of home care, PMV care or traditional care either before or instead of going to a formal health provider.

Those who go to a formal provider include many in very serious condition (4.5% of the total die on the way).

However, almost two-thirds manage to reach a provider.



HOME CARE

Home care shows a mix of using both what is available at home and from traditional and drug shop providers outside the home.

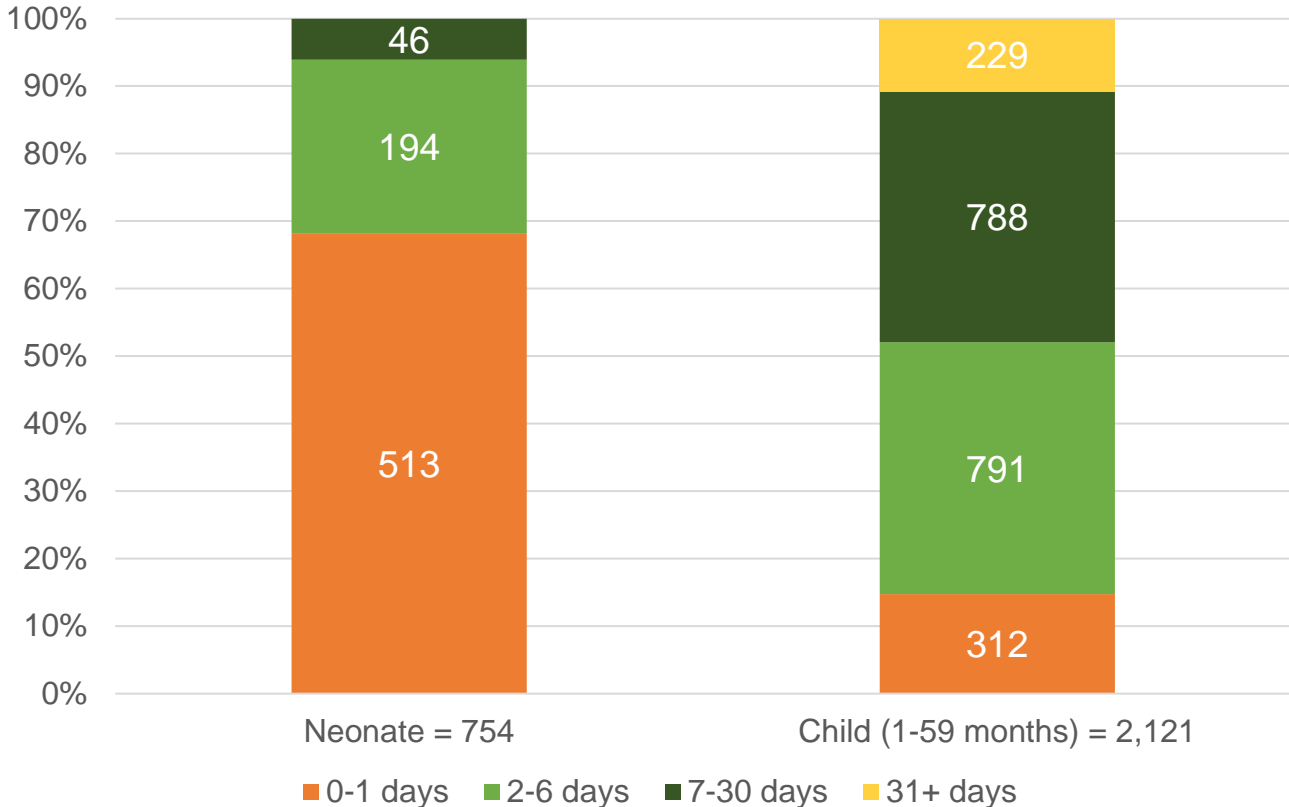
	Homemade treatment	Traditional medicine from outside	Modern treatment available at home	Modern medicine purchased from outside	ORS	Others	Number of children
Zone	%	%	%	%	%	%	No.
NC	57	27	54	61	26	3	78
NE	34	29	37	62	30	10	211
NW	54	44	38	62	25	3	238
SE	16	14	41	62	8	3	39
SS	75	63	38	44	3	0	19
SW	31	0	42	27	8	27	26
Total	44	33	40	60	25	6	611



LENGTH OF FINAL ILLNESS

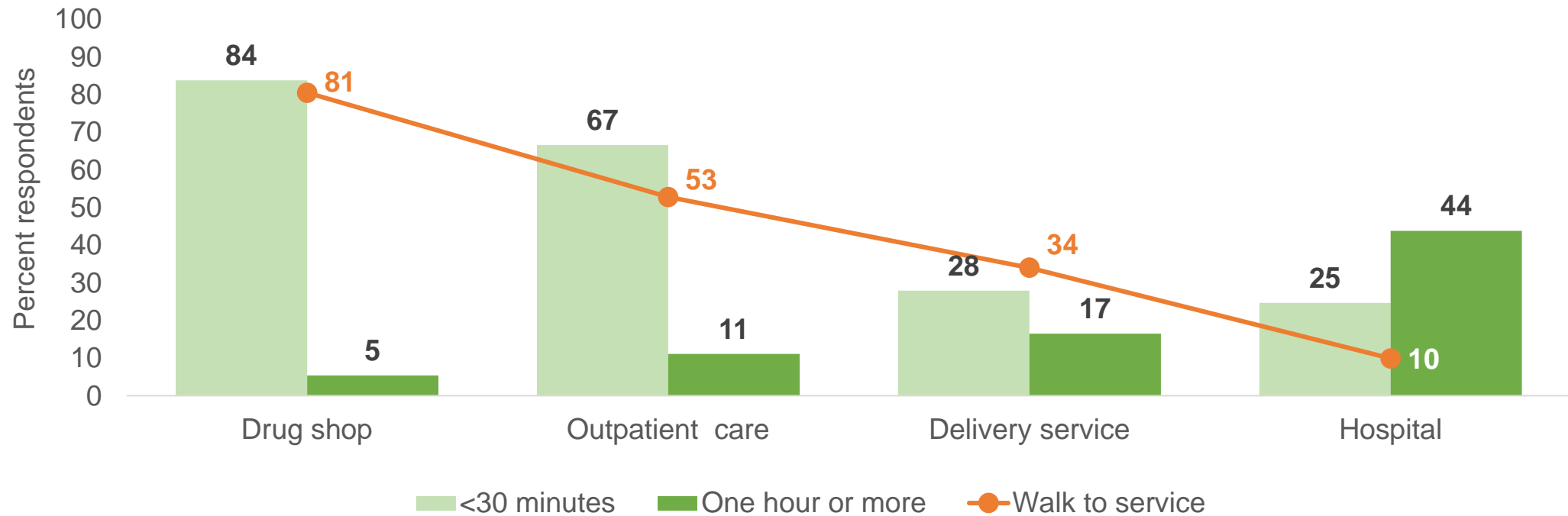
68% of neonatal deaths occur on the day of or day after the illness started so interventions would need to be very fast to be effective.

Only 15% of final illnesses in children 1-59 months were less than two days in length, but half died within one week. There was usually time to seek effective treatment.

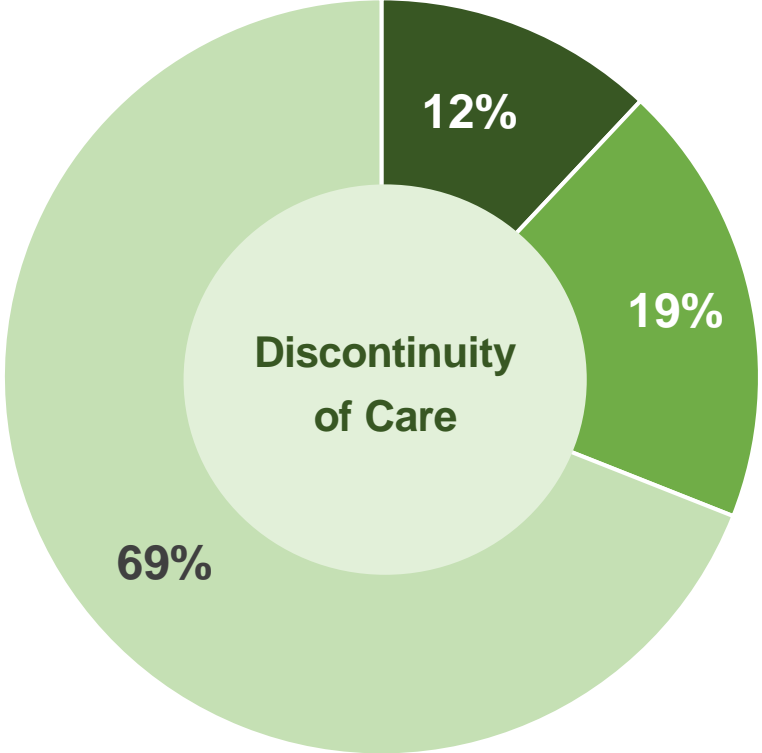


DISTANCE TO CARE

Informal providers such as drug shops (PMVs or pharmacies) are highly accessible to most families in the VASA. Formal providers, especially hospitals, require more transport time and motorized transport to access.



DISCONTINUITY OF CARE IN THE FINAL ILLNESS CHILDREN LEAVING THE FIRST HEALTH PROVIDER (N=1,068)



- Received a referral to another provider
- No referral but received home care instructions
- No referral and no instructions

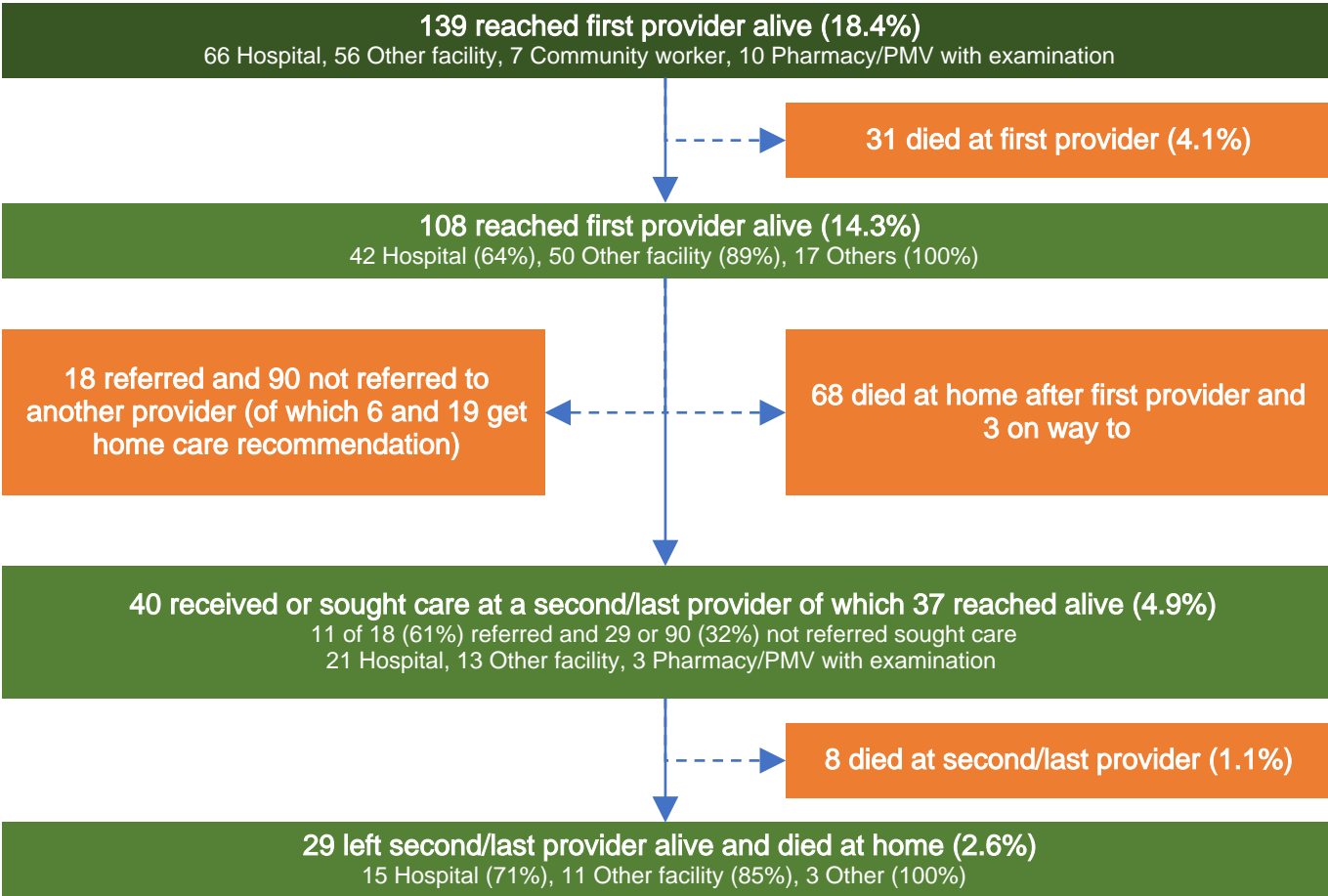


HEALTH PROVIDER CARE FOR NEONATES

Most neonates with fatal illnesses who reach care do not stay until death but return home (4% of total die at first provider and 14% leave).

Most are not referred to other facilities and most do not get home care instructions.

Only 5% of the total reach a second facility and again most go home before death (4%).

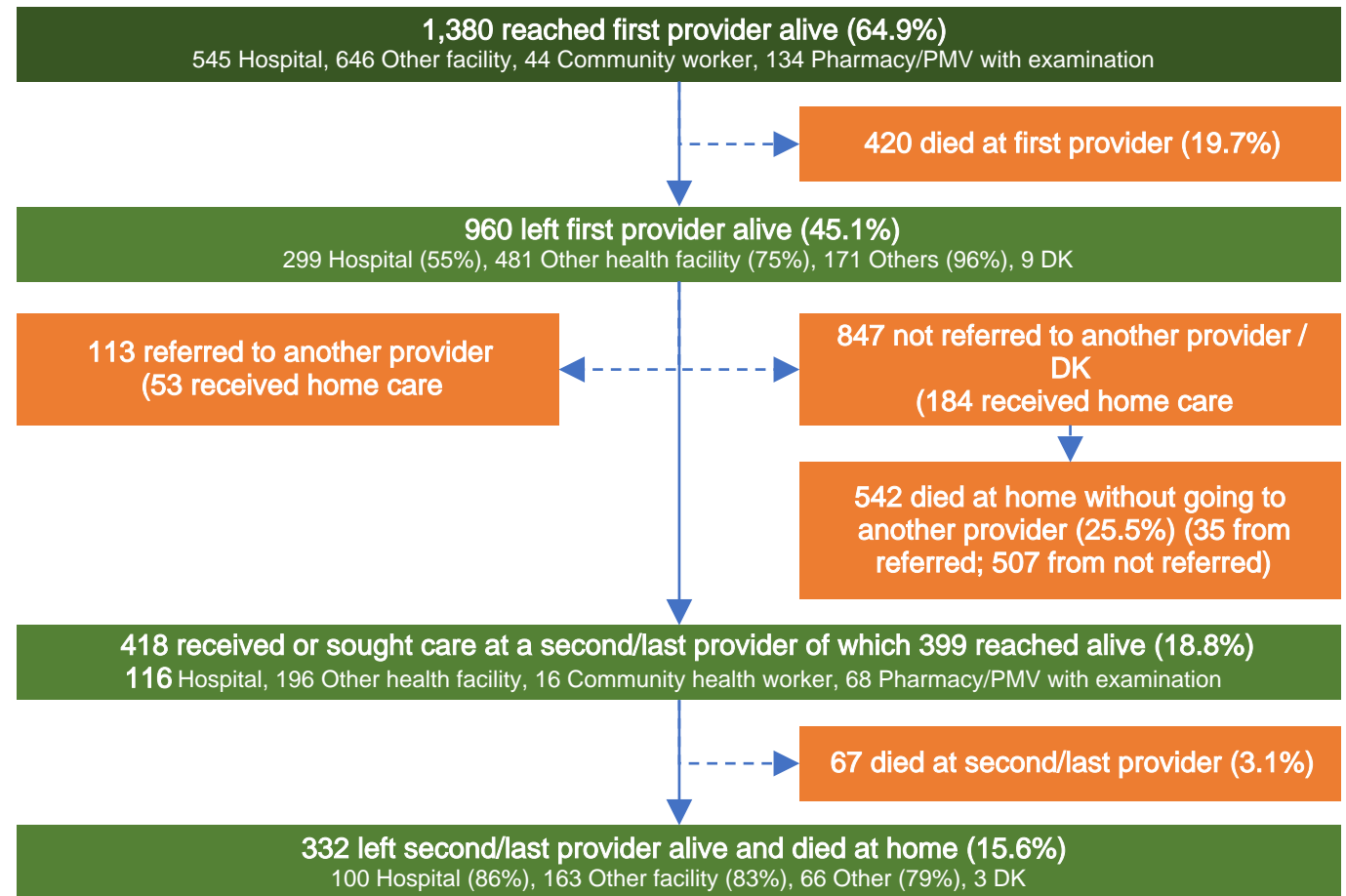


HEALTH PROVIDER CARE FOR CHILDREN 59 MONTHS

Most children with fatal illnesses who reach care do not stay until death but return home (20% of total die at first provider and 45% leave).

Most are not referred to other facilities and most do not get home care instructions.

19% reach a second provider but most go home to die (16%).



TYPES OF HEALTH PROVIDERS SEEN BY SICK CHILDREN

Public sector facilities are important everywhere, but the private sector is a large proportion in all but the North West and North East zones.

Zone	Type of health provider								Cases No.
	Government/Public			Private/NGO			Community nurse/ midwife	Pharmacy or PMV that sees patients	
	Hospital	Health Centre	Health Post	Hospital	Clinic (formal)	Clinic (informal)			
%	%	%	%	%	%	%	%		
NC	36	23	3	6	26	0	2	4	314
NE	34	42	3	3	7	3	2	7	460
NW	42	28	8	1	3	1	4	13	1,037
SE	10	26	1	43	11	1	7	1	140
SS	39	27	0	19	6	2	3	2	98
SW	35	18	0	22	10	5	7	2	82
Total	37	30	5	7	8	2	3	3	2,131



TRANSPORT USED TO GO TO A HEALTH PROVIDER

26% reported walking to the place of care and the rest used motorized transport, mostly motorcycles.

Zone	Transport used to go to provider (more than one allowed)								Number going to a provider No.
	Ambulance %	Walking/ carried %	Motorcycle %	Private car %	Taxi/ paid driver %	Three wheeler %	Public transport/ bus %	Boat %	
NC	0.6	19	56	5	5	13	8	1	314
NE	0.2	30	47	4	9	9	2	1	460
NW	0.2	27	55	4	8	4	8	2	1,037
SE	0	20	48	14	3	4	19	1	140
SS	0	9	72	1	7	3	0	5	98
SW	0	39	40	10	5	2	16	1	82
Total	0.2	26	53	5	7	6	7	2	2,131



CONCERNS IN GETTING CARE FOR SICK CHILDREN BY ZONE

Distance, costs, transport and going at night were the most common concerns.

	Distance	Transport	Costs of care	Permission	Going when late at night	Quality of care in facility	Health worker attitudes	Not sick enough to need care	Need traditional/spiritual care	Others	Any concern expressed	N
Zone	%	%	%	%	%	%	%	%	%	%	%	No.
NC	21	16	20	3	7	4	3	2	9	1	39	419
NE	26	13	17	4	17	2	3	2	3	1	46	671
NW	21	6	17	4	6	2	2	5	7	2	42	1,336
SE	19	6	17	1	8	11	3	1	4	2	44	198
SS	14	9	20	1	5	7	7	3	7	0	36	152
SW	16	9	22	3	18	4	3	6	9	3	54	103
Total	21	10	18	4	9	3	2	3	6	2	43	2,879



SOCIAL CAPITAL SURVEY MODULE: DID YOUR COMMUNITY WORK TOGETHER IN PAST THREE YEARS ON ANY OF THESE?

Community joint activities vary greatly by zone and type of activity.

	Education/ schools	Health services/ clinics	Paid job oppor- tunities	Credit/ Finance	Roads	Public Transport	Water distri- bution	Sanitation services	Agri- culture	Justice/ conflict resolution	Security/ Police services	Mosque/ church/ temple	Other (specify)	Average of 13 items	N
Zone	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
NC	63	48	25	21	57	35	61	69	72	88	74	94	19	56	478
NE	26	19	8	10	32	1	21	16	48	51	38	58	0	25	704
NW	44	34	11	15	33	7	43	40	63	70	50	77	4	38	1,371
SE	47	36	6	5	30	17	33	76	32	58	57	34	1	33	219
SS	8	5	1	1	7	0	8	70	26	63	27	4	0	17	157
SW	25	30	11	28	17	16	30	43	43	43	39	46	1	29	145
Nigeria	40	31	11	14	34	11	38	44	56	66	50	67	5	36	3,074



RESULTS

Qualitative Component

QUALITATIVE COMPONENT RESULTS: THEMATIC AREAS

1. Health beliefs

2. Poverty

3. Socio-cultural context

4. Poor infrastructure

5. Insecurity

6. Perceived quality of care

7. Enabling factors



SICKNESSES DEFY ORTHODOX MEDICINE

Belief that only traditional medicine can cure some diseases keeps caregivers from formal care.

Widespread, but very common in the South East and North West

There is a sickness that is common among children and even the adult which is fatal within a short period if measures are not taken immediately. This is called daji, it is spiritual. Patients with this kind of sickness can be taken to the hospital but cannot take injection of any kind and if injected, it will lead to sudden death'.



Female community member



TRADITIONAL CARE

Traditional care is the first-line treatment for most caregivers when formal care is not accessible.

'If a child or an adult falls sick, we don't have a chemist here. Before we go (to the hospital) we look for the traditional medicine and give the child. If the sickness persists, then we find our way to the hospital'



Female community member

'...well, we started with the traditional medicines at home first . When we noticed there was no progress, then we went to the hospital.'



Caregiver

FATALISM

Resignation to fate (because health outcomes are believed to be predetermined and care cannot change the outcome) keeps caregivers from seeking formal care.

Widespread, but very common in the North West, North East and South West

'In my thinking, things that concern children, it is the will of God. Even if you get medicine and God has destined that the child's life has ended, it will end . Even if you take an action and it's the child's time, there is nothing you can do about it'.



Caregiver



SPIRITUAL CAUSATION

'Spiritual attacks' require spiritual solutions so caregivers may not seek formal care when they suspect spiritual attack.

Common in the South South and South East.

*Yes I believe the deaths of my babies are linked to **spiritual attack** because any time I give birth to my baby, it does not take time before they die'*



Caregiver



TRADITIONAL MEDICINE

Traditional medicine is preferred for 'spiritual attacks'

'Sometimes when the child is not well, they will say it is a spiritual problem Sometimes the spiritualists [the boka] will be telling them not to come to the hospital, that if they take injection their traditional medicine will not work.'



Healthcare provider

SYNCRETIC HEALTH BELIEF

Belief that a combination of traditional and orthodox care give the best result leads to delay in seeking care.

South East

'You must start the treatment with traditional medicine ... the traditional medicine will "bring out" all the sicknesses in the person's body, then you will use the English medicine to treat all the sicknesses'



Caregiver



POVERTY

Sometimes, caregivers cannot afford cost of care and cost of transportation.

We do not have the money to treat them. We are in lack and my husband does not have money and it truly troubles me. With no money, you cannot get the kind of treatment you desire. When you go there you are not even noticed without money’.



Female community member

‘We normally have to travel to XXX [for treatment], about N500 as cost of transportation only, not to talk about cost of drugs and other services’.



Female community member

SOCIO-CULTURAL CONTEXT

Seclusion of women limits access to care.

A major factor in the North West, North East and North Central.

... some women don't want to come out, they are in purdah and even if they want to come out, the father of the child will not allow them.



Male Healthcare provider



PERMISSION TO GO

Caregivers may not access care for their children because their husbands don't allow them.

'Some women will not feel like going to the health facility, or their spouse will not give them the permission to go because they do not want male health workers to examine or touch their wives



Caregiver

... some women don't want to come out, they are in purdah and even if they want to come out, the father of the child will not allow them.



Female community member

POOR INFRASTRUCTURE

Poor access to potable water and good roads compromise the health of children and access to care.

...most of these ailments are as a result of unclean water. We don't have borehole, well, or pipe-borne water that we could get water from, only the river. The same water our cattle drink from is the same water we too drink from...



Female community member



HEALTH FACILITY: DRUGS & EQUIPMENT & ATTITUDE OF SERVICE PROVIDERS

Caregivers are discouraged from using health facilities because:

- There are no facilities in some communities
- Some facilities are poorly equipped
- Some healthcare providers have poor attitudes towards caregivers

'Yes, tests are very important but, we don't have that [diagnostic] equipment here.... If they will build a maternity clinic here, and provide that equipment , I believe the problems will be very minimal.'



Male community member

'The healthcare centre is not fully functional to address our health challenges. The facility is just a name. It lacks adequate drugs, equipment, and even staff availability is not guaranteed. They usually come twice a week and nothing serious in terms of adequacy of services, drugs, and equipment is coming from them, unless you travel to another community.'



Caregivers

'Well, I can say they have bad attitude in dealing with people. They normally shout and abuse people with their evil or vulgar language. They also take so much time before attending to us ... That is why many don't want to go there and prefer traditional medication.'

INSECURITY

Insecurity reduces access to care:

1. Keeps caregivers from accessing facilities
2. Keeps healthcare providers from going to facilities
3. Reduces household income

'... for now we are not taking delivery (at night) since we are not residing here, and the reason we are not residing here is because the security issues in this community have been compromised [crime] (kidnapping, armed robbery, and other social vices) is the order of the day ... and so ... we cannot reside here because we are not sure of our safety.'



Female
Healthcare provider

PERCEIVED QUALITY OF CARE

Caregivers perceive poor quality of care and poor service provider attitude.

The healthcare centre is not fully functional to address our health challenges. The facility is just a name. It lacks adequate drugs, equipment, and even staff availability is not guaranteed . They usually come twice a week and nothing serious in terms of adequacy of services, drugs, and equipment is coming from them, unless you travel to another community'.



Caregiver

*'Well, I can say they have **bad attitude** in dealing with people. They normally shout and abuse people with their evil or vulgar language. They also take so much time before attending to us That is why many don't want to go there and prefer traditional medication '.*



Female community member

ENABLING FACTORS

These include: Immunisation programme and sensitization campaigns, UN agencies and other international and local organizations

'Sometimes UNICEF does assist our children. ANC is also sponsored by NGOs like Bill and Melinda Gates Foundation in support of our healthcare system'.



Healthcare provider

...the major programme that the government has introduced to reduce under-five deaths in our community is the immunisation and sensitisation health seminar programme to enlighten our women on the importance of bringing their children for immunisation and how to properly take care of their children to reduce incidence of child death'.



Female community member

KEY CONTEXTUAL ISSUES IN UNDER-FIVE MORTALITY

Zone	States	Poverty	Rural life	Health beliefs	Family-level decision-making	Insecurity	Poor access to health facilities	Cultural practices
North Central	Niger	✓	✓	-	✓	-	✓	-
	Plateau	✓	✓	-	-	-	✓	-
North East	Bauchi	✓	✓	-	✓	-	✓	✓
	Gombe	✓	✓	-	✓	-	✓	✓
North West	Jigawa	✓	✓	✓	✓	-	✓	-
	Kebbi	✓	✓	✓	✓	-	✓	-
South East	Ebonyi	✓	✓	✓	-	✓	✓	-
	Imo	✓	✓	✓	-	✓	✓	-
South South	Akwa Ibom	✓	-	✓	-	✓	-	-
	Rivers	✓	✓	-	-	✓	-	-
South West	Ekiti	✓	✓	-	-	-	✓	-
	Osun	✓	✓	✓	-	-	✓	-



LIMITATIONS

- Insecurity prevented the inclusion of some parts of the country in the 2018 NDHS. This explains why insecurity did not come up as a major factor in the North in the 2019 VASA.
- Sufficient data from clinical autopsies is not available to compare with 2019 VASA results.



POLICY IMPLICATIONS

HOME, COMMUNITY AND PREVENTIVE ISSUES

Home and community

- Achieve universal basic education - especially for girls
- Improve economic opportunities for poor families
- Improve local infrastructure - including water, sanitation and roads

Home newborn care and nutrition

- Avoid common harmful practices, such as late breastfeeding and early bathing and improve home feeding behaviors

High priority routine and preventive services

- Universal access to high quality antenatal and labour/delivery care
- High coverage of routine immunizations, micronutrient (Vitamin A), malaria prevention (LLIN), etc.



POLICY IMPLICATIONS COMMUNITY AND FACILITY ILLNESS MANAGEMENT

Community level

- iCCM allows community management of common diseases
- Community management of young infants with signs of possible severe bacterial infection when referral is not possible.
- Community Management of Acute Malnutrition (CMAM)
- Improve care at pharmacies/PMVs (to at least iCCM level)

Health facility level

- Reduce barriers to accessing health care
 - High and unpredictable costs (truly free care, insurance schemes)
 - Functional Primary Health Care centers with 24 hour service
- Improve clinical practices (IMCI, LSS, ENC, HBB, MPSBI, etc.)
- Improve severe/complicated case management and referral for both mothers and children



POLICY IMPLICATIONS

CONTEXTUAL BARRIERS TO HEALTH CARE

Address health beliefs

- Improve knowledge and correct misconceptions about child health care. Need innovative context - specific interventions
- Legal frameworks for protecting children from harmful practices

Access to health services

- Primary health care needs enough investment and staffing
- Staff need to provide respectful client friendly care
- Health care workers need better support and security

Social-cultural barriers

- Secure women's rights and ability to access health services when needed
- Improve the security situation



CONCLUSION

Nigeria's slow progress in child survival has left it behind other countries.

The causes of death and reasons behind these causes are clear for Nigeria in the VASA 2019 study.

It is up to Nigeria's leaders to take action to accelerate Nigeria's development as a society.

It is up to Nigeria's health authorities to strengthen Nigeria's primary health care system so that children no longer die from preventable causes.

It is up to Nigeria's people to adopt health promoting practices and move away from beliefs and practices with negative implications for child survival.



APPRECIATION

- National Population Commission
- Federal Ministry of Health
- Steering Committee
- Technical Working Group
- Study participants – Caregivers, healthcare workers, community members
- Field researchers and supervisors
- CIRCLE Team
- USAID



TECHNICAL WORKING GROUP

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Coordinating Implementation Research to
Communicate Learning and Evidence
(CIRCLE)



THANK YOU

The 2019 VASA products will be available on the National Population Commission website at: nationalpopulation.gov.ng

