Partnership for Reviving Routine Immunisation in Northern Nigeria; Maternal Newborn and Child Health Initiative

PRRINN-MNCH Baseline Studies 2009

Summary Report

Zamfara

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Contents

Introduction

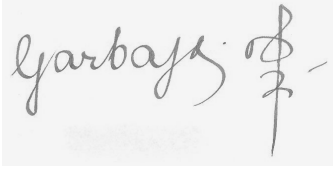
The PRRINN-MNCH programme is working to strengthen maternal, newborn and child health services within Katsina, Yobe, Zamfara and Jigawa states. All four states experience higher than average rates of maternal and child mortality, and high rates of poverty. In 2007 the DfID-funded PRRINN programme was set up to strengthen routine immunisation in these areas. This was joined in 2008 by the complementary Norway-funded MNCH programme which aims to improve maternal, newborn and child health. The jointly-implemented programmes work to facilitate the states in delivering their own health reform agendas in support of the revitalisation of primary health care (PHC) services, with a special focus on improving MNCH outcomes.

PRRINN-MNCH activities are designed and implemented in close collaboration with local communities, state and federal stakeholders. The programme is structured around the following key themes or outputs:

1. Strengthened State and Local Government Authority (LGA) governance of PHC systems geared to MNCH;
2. Improved human resource policies and practices for PHC;
3. Improved delivery of MNCH services via the PHC system;
4. Operational research providing evidence for PHC stewardship, MNCH policy and planning, service delivery, and effective demand;
5. Improved information generation with knowledge being used in policy and practice;
6. Increased demand for MNCH services;
7. Improved capacity of Federal Ministry level to enable States' routine immunization activities.

In early 2009 PRRINN-MNCH carried out a variety of baseline studies relating to these outputs, which provide crucial data about the current status of MNCH services, the major challenges and the opportunities to bring about change. This report contains summaries of the key findings of these studies, along with recommendations. These findings serve as reference points against which the success of the programme will be gauged over time in its efforts to improve the quality and availability of maternal, newborn and child health services in Northern Nigeria.

In June 2009 the PRRINN-MNCH programme held a 2-day baseline studies review meeting in Kano. Overviews were presented on several themes relating to the current status of maternal, newborn and child health in the four states, which then formed the basis for discussions of strategies and plans to address the key issues identified. We were delighted to welcome to this meeting a variety of stakeholders from Katsina, Yobe, Zamfara and Jigawa, who contributed to the many productive discussions with the programme's technical advisors and other experts in the field of maternal, newborn and child health. The strong turn-out demonstrated the depth of commitment to improving maternal and child health within these states, and the meetings proved an inspirational and informative experience for attendees.



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Governance Baseline Studies Summary – Zamfara

Introduction

Each state has had three baseline governance assessments – policy and strategy assessment, public finance management assessment and a political economy assessment. The summary below outlines the findings of the assessments in Zamfara as they relate to the eight key 'governance' issues:

- Free MNCH services
- Bringing PHC under one roof
- Strengthening budget and planning cycle
- Public finance management
- Routine immunisation strengthening
- Eminent Persons Group
- Midwifery service scheme and other HR issues
- Memorandum of understanding

Findings and Recommendations

Free MNCH services

This is seen as a high priority as it emerged from the State Council for Health and there have been several political pronouncements on this issue. Key issues to consider include:

- The composition of the committee should include all role-players (including other government departments such as MWA and MOLG).
- The committee will need assistance identifying policy choices and costing/packaging the different options.
- There is a possibility to link free MNCH services with the service delivery fund.

Given the poor health indices, efforts to improve MCH are key political issues. Thus, it is important to partner with key politicians (and their wives) to drive this initiative forward.

Bringing PHC under one roof

While this is seen as a priority a number of factors need to be taken into account as this issue is taken forward:

- While creating opportunities for dialogue on a PHC Agency is straightforward, attention needs to be paid to LGA Chairs, SMOLG, Emirs and other elites to ensure broad ownership and buy-in.
- It is important to ensure the Governor's commitment to the initiative, and potential advocates in the State Health Assembly need to be identified.
- Policy development is usually easier than implementation.
- The implementation team needs to be realistic about targets for the Agency.
- Funding sources for the Agency and where they will be lodged must be clearly identified
- The implementation team should design and establish effective accounting and financial management systems required by the Agency and establish mechanisms for the reliable and timely release of funds for the Agency.

As with any new initiative, attention needs to focus on packaging the proposals and changes so that all stakeholders understand the issues and can contribute to the outcomes. Special care needs to be undertaken to ensure that the legislation is not distorted in the process and that work on repositioning the relevant MDAs is initiated early as a result of the proposed changes.

Public finance management

Given the specific interest and support of the Ministry of Budget and Planning, there are several opportunities that exist in Zamfara at the moment. Thus, it is important to continue to support the Ministry of Budget and Planning in institutionalising the planning and budgeting process, including budget tracking. Equally important are initiatives to improve reporting and performance reviews. Some concerns were expressed on the timely release of committed funds and weak documentation at all levels. Specific activities would include:

- Strengthening the accounting and financial management system.
- Supporting the MOBP to review and develop a robust budget classification system and Chart of Accounts.
- As the 2009 budget reflects the operational plan, the focus needs to shift to track release (especially at LGA level).
- Monitoring service outputs (numbers, infrastructure), also because the operational plan is reflected in the budget.
- Reviewing the balance between the capital and recurrent components of the budget.
- Strengthening the SMOH DPRS to ensure that the SMOH and the SMOBP continue to work closely together.

Routine immunisation strengthening

There has been considerable progress around strengthening the technical aspects of routine immunisation services (e.g. cold chain management, health worker training). With the imminent start up of the service delivery fund, an opportunity exists to enhance routine immunisation services. Support is needed to implement the service delivery fund, track releases and communicate all this to benefitting communities.

Eminent Persons Group

This needs to be seen as an informal grouping of interested citizens.

Midwifery service scheme and other HR issues

The initial focus needs to be on assisting the state in implementing the midwifery service scheme and employing unemployed skilled health workers. Activities would include:

- Establishing a database of unemployed skilled cadres.
- Developing a plan with LGAs to hire skilled cadres.
- Follow up state-level preparations to ensure that the midwifery service scheme is a success (e.g. allowances and accommodation is in place).

Other HR activities (e.g. addressing the maldistribution of health workers) are not seen as a high priority but where opportunities arise, these opportunities should be supported.

Memorandum of Understanding

This is seen as a high priority as it would assist in defining key issues and milestones. This would allow all partners to pursue a change plan that outlines what both the programme and the state wish to achieve with a focus on institutional performance (not just individual capacity), mutual responsibilities and inputs, a timetable and agreed targets, processes for assessing progress, etc. Thus, the MOU will strengthen policy and strategy development and create adequate links to the budgeting and planning process.

Human Resources Baseline Studies Summary

Introduction

Accurate and up-to-date information is required for Human Resources for Health (HRH) policy formulation, strategic planning and for decision making on human resource management (e.g. recruitment, deployment, retention) and human resource development (e.g. education, training and continuing professional development). Identifying and understanding key HR issues and challenges will help inform the development of appropriate strategies and interventions to address them. In order to improve the quality and availability of HRH data, to provide a reliable and up to date analysis of the HRH situation within and across the states and provide a basis for judging subsequent programme progress towards its targeted goal and purpose, a number of baseline studies and survey were conducted in the three states. Those that provided HRH relevant data included:

- Policy and Strategy Making Baseline Study;
- Health Facility Survey administered in all government hospitals and 239 PHC facilities in Katsina, Yobe and Zamfara;
- Assessment of Health Training Institutions in the three states including a review of the training curricula for nurses, midwives and CHEWs;
- HR Audit conducted in Jigawa, Katsina, Yobe and Zamfara.

Information was collected through various instruments and methodologies including key informant interviews; questionnaires & rapid assessment tool (RAT); focus group discussions; site visits to collect data and administer tools; and technical & developmental stakeholder workshops.

Findings

Policy and Strategy Making Baseline Study

The Policy and Strategy Making Baseline Study provides information on HRH stakeholder, functions, structures and the HR policy environment. It found that in many cases policy formulation is delinked from research, information and the realities on the ground. There is some understanding of HRH issues and challenges but the strategies developed to address them are too broad; more detailed plans and activities are required to ensure that the plans are implemented. The Study indicated that the involvement and participation of key HR stakeholders in policy formulation, planning and implementation also need to be improved. For example in the Katsina report it was noted that the some of the key institutions involved in human resource development such as the Joint Human Resource Management Committee responsible for recruitment, discipline and promotion of staff and the College of Health Sciences were not involved in the formulation of training plans for the State. A key recommendation of the review report was that '*all the States definitely and urgently need support to package a strategy for scaling up the recruitment, placement, retention & development of health human resources'.*

HR Audit and Health Facility Survey

The key findings of the HR Audit and the Health Facility Survey were that there was an inequitable distribution of facilities in relation to population across each state and that there was low workload and provision of MNCH services at hospital and PHC facility levels. For example in Dapchi MCH the two midwives there reported that there had been were 24 deliveries conducted in 3 months. Hospitals in all three states reported that they were conducting less than 10% of the expected deliveries annually.

The surveys found that many of the PHC facilities are overstaffed but these surpluses comprised mainly untrained staff. For example in Bursari LGA (Yobe) there was 1 midwife and 178 health assistants. In other facilities it was noted that there are shortages of trained health professionals. In the hospitals in particular there is a critical shortage of nurse-midwives for the provision of MNCH services and only 35% of hospitals have the staff required to provide 24/7 EOC services

A key challenge across all the states is the maldistribution of health workers including geographical distribution (urban/rural disparities), distribution by level of care (tertiary, secondary, and primary levels) and distribution by skills mix (skilled and non-skilled birth attendants and health workers). Many dispensaries and health clinics serving rural populations are not functional, inaccessible and many have been abandoned. Many of the trained health professional available are based in the hospitals, for example 79% of the total number of midwives (430) in Katsina are working in the 3 hospitals. The majority of the dispensaries and health clinics surveyed are staffed by unqualified and untrained staff, few facilities provide skilled attendance at birth and many of the SBAs and CHEWs deployed to the PHC facilities are male. For example of the 459 staff found in the PHC facilities surveyed in Yobe, 10 (2%) were midwives, 60 (13%) were CHEWS and 389 (84%) were Health Assistants.

Assessment of the Health Training Institutions

The Assessment of the Health Training Institutions found that the number and type of students produced are not meeting health sector requirements; in particular there are too few nurses and midwives produced. The resources and infrastructure available in the institutions cannot support the number of enrolled students and the quality of the teaching and learning is being compromised as a result. There is a severe shortage of tutors and of tutors with appropriate skills; current student:staff ratios range between 1:50 and 1:120 much higher than universal standard of 1:10 to 1:15. Institutional policies to attract recruit and retain teaching staff are weak and there is limited professional development for teaching staff. There is a high attrition rate from pre-service training. Student hostels are overcrowded and dilapidated, and water and sanitation services are inadequate. Furthermore the health professionals that are being produced are not being recruited and deployed within the health sector.

Opportunities for in-service training and/or continuing professional development for staff in post are limited. Some staff have been trained in immunisation but few have received training in MNCH related areas, For example many of the midwives and doctors in the hospitals require training in Life Saving Skills (LSS) for EOC and newborn care.

Across all three states human resource management and development (HRM/D) capacity is limited and HR is not perceived as a core strategic function within the states. Those responsible for the HR function tend to be ex-nurses and community health officers who have not received any specific HR-related training. HR Administration systems and procedures are highly centralised and HR information systems are not fully functional, and are poorly maintained and poorly utilised for HR decisions.

Recommendations

As a result of the findings of the survey several key issues and challenges were identified. Improved strategic coordination, organisation and oversight of the HR function are required, which will involve the formulation and development of appropriate HR policies, structures, strategies and plans to ensure that the challenges are addressed in a holistic, cost effective and comprehensive manner. HR capacity, systems and procedures, including information systems, need to be strengthened at all levels to be more effective for strategic and operational HR planning, management & development.

Key policies and strategies will be required as follows:

- On recruitment to ensure that health workers shortages are addressed;
- On deployment and redeployment to address inequitable distribution;
- On retention to address shortages & attrition of health professionals and teaching staff and to improve distribution by level of care and skills mix.

Key recommendations:

- States should utilise the Midwifery Corps scheme and one year compulsory rural service scheme to improve distribution of trained midwives and skills mix in understaffed areas/facilities.
- Performance management systems are needed to improve productivity and the provision of quality MNCH services.
- The pre-service training institutions need to be strengthened and accredited, with particular attention to improving infrastructure & utility services, student:tutor ratios, curricula and training materials.
- Existing SBAs and CHEWs require on-the-job competency based training programmes to improve the quality and provision of MNCH services.
- Retraining of 'surplus' staff could be considered so that these staff can be redeployed to understaffed facilities and underserved areas.

MNCH Service Provision Baseline Survey Summary

Introduction

Provision of Skilled Birth Attendance (SBA) and availability of Essential (or Emergency) Obstetric Care (EOC) coupled with Newborn Care (NC) are key strategies that if implemented will reduce maternal and neonatal mortality and morbidity. Providing Skilled Attendants able to prevent, detect and manage the major obstetric complications, together with an enabling environment, which includes the equipment, drugs and other supplies essential for their effective management as well as a back-up referral system, is probably the single most important factor in preventing maternal deaths.

Most obstetric complications cannot be predicted and occur suddenly and unexpectedly – prompt access to good quality EOC is essential. For an estimated 15% of all women, such a complication will be life threatening unless she has access to EOC. Having the skills to recognise and then respond effectively to such unexpected events is a key part of a skilled attendant's role.

The PHC and BEOC Health Facility survey was carried out in the three state CEOC (Comprehensive Essential Obstretic Care) clusters. The clusters each comprise 2-3 LGAs around a selected CEOC hospital, constituting a population of around 500,000 per cluster. The survey used quantitative and qualitative approaches including an adapted tool for baseline assessment of health facilities; extracting data on utilisation of health facilities from registers; and key informant interviews with PHC co-ordinators and MNCH co-ordinators in each cluster LGA.

Findings

A total of 238 health facilities (HF) were surveyed, of which 126 were dispensaries (53%), 58 were health clinics (24%), 27 were MCH centres (11%), 21 primary health centres (PHC) (9%) and 4 comprehensive PHCs (2%). 83 HFs were surveyed in Katsina state (Daura cluster), 64 in Yobe state (Geidam cluster) and 91 in Zamfara state (Bungudu cluster). The estimated number of pregnant women for the 3 month period for the Katsina, Yobe and Zamfara clusters was 6,508, 4,279 and 6,345 respectively.

Provision of Maternal, Newborn and Child Health services

Results of this survey indicate that only a small proportion of HFs provide MNCH services. Most dispensaries only provide curative care and some also childhood immunisation, which is offered weekly or once or twice a month. Not all CHC, PHC and MCH clinics offer MNCH services.

Only 26% of HFs surveyed in the 3 CEOC clusters across the 3 states offered ante-natal care (ANC) services, while none of the HFs offered all components of ANC (iron supplements; syphilis testing; haemoglobin estimation; urine testing; tetanus vaccination; intermittent preventive therapy; insecticide treated nets; and prevention of mother to child transmission of HIV). Only about 36.2%, 1.1%, and 6.6% of all expected annual births occur in HFs below hospital level in CEOC clusters in Katsina, Yobe and Zamfara states respectively. Based on the total population (1,631,556) of the CEOC clusters, a minimum of 3 CEOCs and 13 BEOCs will be required. Only 1 out of the 238 HFs surveyed provided all six BEOC signal functions. Post natal care (PNC) was only available in about 20% (17/83) of HFs in Katsina state, in about 8% (7/91) in Zamfara state and in about 12% (8/65) of HFs in Yobe state.

Neonatal care was also not available in almost all HFs surveyed. Child welfare services (under five clinics) are usually restricted to childhood immunisation and vitamin A distribution. Growth monitoring and nutrition activities are rarely done and Integrated Management of Childhood Illness is not practised. Very few HFs offer Family Planning (FP) services and if they do the range of contraceptives on offer is limited to three methods: oral contraceptives, injectable contraceptives and condoms.

Accessibility, emergencies and facility conditions

In general utilisation rates of existing MNCH are very low, even in urban areas where accessibility is not an issue for the urban population. In rural areas distances to health facilities for remote populations, the difficult terrain, lack of roads and means of transport and costs of transport (particularly for emergency cases) make MNCH services poorly accessible; moreover rural dispensaries and health clinics usually do not provide MNCH services.

No systems are in place for referral of emergency (obstetric and paediatric) cases. Ambulance services are not available for most HFs and where ambulances are available at PHC offices or HFs there are no resources for fuel, maintenance and repair. No means of communication are available at HFs to call for emergency transport. Hiring a local vehicle in case of emergency is prohibitively expensive.

No arrangements for maintenance and repair of HFs and inventory are in place. Most buildings of HFs show signs of wear and tear and vary in state of disrepair and decay. HFs which receive support from development partners such as the MDG project, IFAD or the World Bank are in much better condition. Lack of water supply, water storage and hand washing facilities is a problem in almost all HFs. Even many newly constructed HFs have no water supply or storage facilities. Waste disposal is inadequate in most HFs and dispensaries and HCs have no toilet facilities. There is a lack of staff quarters at HFs and existing staff houses need refurbishment and lack toilets, water supply and water storage facilities.

Emerging issues

- Critical shortage of professional staff, particularly (nurse-) midwives and female staff for provision of maternal care.
- Inadequate planning and management of human resources.
- Lack of in-service training of professional staff in post.
- Lack of supportive supervision.
- Absence of MNCH services in rural areas.
- Poor quality of care.
- Lack of equipment and furniture in rural HFs.
- Non-availability of drugs and medical supplies (health care providers sell their own supply of drugs to patients)
- Lack of maintenance of buildings and poor condition of rural dispensaries and HCs, unless the HF received support from a development partner.
- No water supply and lack of water storage or hand washing facilities at HFs.
- Most HFs are dirty.
- Lack of staff houses and poor condition of existing staff quarters in rural areas, which have no water supply or storage facilties, toilets or power supply.
- No referral system (means of transport, means of communication to call for emergency transport) for emergency (obstetric and paediatric) cases.

- No community participation in health care and no involvement of communities in management of HFs.
- Poor record keeping.

Recommendations and next steps

The identified problems in MNCH service delivery are complex and not simple to resolve. Interventions are needed at different levels and besides improving service provision involve strengthening of governance and health systems in support of MNCH, with special attention to planning and management of human resources. The following points are proposed next steps for the PRRINN-MNCH programme to address the problems identified in MNCH service provision:

- Organise meetings at state level for the dissemination and discussion of the findings of the baseline surveys and for consultation and discussion of the way forward with stakeholders in each state, including the SMOH, SMOLG, LGA administration and PHC offices, political and community leaders and other development partners.
- In consultation with stakeholders from the SMOH and SMOLG, select and agree on model LGAs in each state for PRRINN-MNCH support.
- In consultation with stakeholders in the three states, select and agree on how many and which HFs to be supported by the PRRINN-MNCH programme for upgrading to BEOC facilities or 24/7 maternity units (suggest 4 + 4 in each target CEOC cluster).
- Order and supply essential equipment and furniture to the selected 4 BEOC and 4 24/7 PHC facilities in each CEOC cluster.
- Support the establishment of Drug Revolving Funds (DRFs), giving priority to PRRINN-supported BEOC facilities and 24/7 HFs.
- Agree with other development partners who will support the refurbishment of selected BEOC and 24/7 HFs, including provision of water supply and storage facilities, toilets and solar powered electricity.
- In collaboration with the SMOH, initiate advocacy for increasing the allocation of financial resources to LGAs for MNCH service provision; posting of preferably female nurse-midwives as MCH coordinators in each target LGA; and recruitment of more skilled birth attendants and other professional staff to ensure minimum acceptable staffing levels in target HFs (this has also budget implications).
- Support training of staff in MNCH, such as LSS, MLSS, IMCI, newborn care, and support capacity building by training a pool of master trainers at state level and strengthening existing health training institutions to play a greater role in in-service training for MNCH.
- Governance and health systems at LGA level need urgent attention and support.
- Human resource challenges need immediate short and long term solutions, which will determine overall programme success.

Operations Research Baseline Survey Summary

Introduction

One of the primary goals of the MNCH Programme is to enable a data-based approach by providing population-based data which is used both to inform implementation plans and to gauge progress towards meeting key indicators over the course of the project. The Operations Research baseline survey provides an initial assessment of the health status and health seeking behaviors for women in Katsina, Yobe and Zamfara states. The same questions will be repeated after the programme has been implemented to assess how Health Systems Development activities conducted by the PRRINN-MNCH programme in the target states have affected the following:

- Maternal and child health outcomes (using indicators such as infant and under-5 mortality).
- Use of health care services by children and mothers (using indicators such as immunization coverage and antenatal clinic attendance).

The survey is comprehensive yet designed to be comparable to both clinical and other national indicators, including data on reproductive history, maternal and child health and child health-seeking behavior. It is population based, which means that it is representative of all women of reproductive age (15-49 years) and children in the three state areas participating in the project, not just those who seek health care services. Questionnaires were composed of two sections:

- A background section eliciting information on household characteristics such as economic status and composition.
- A detailed reproductive history, including dates of pregnancies, births and deaths of children, use of health care during pregnancy, delivery and postnatal periods, immunization, *etc*.

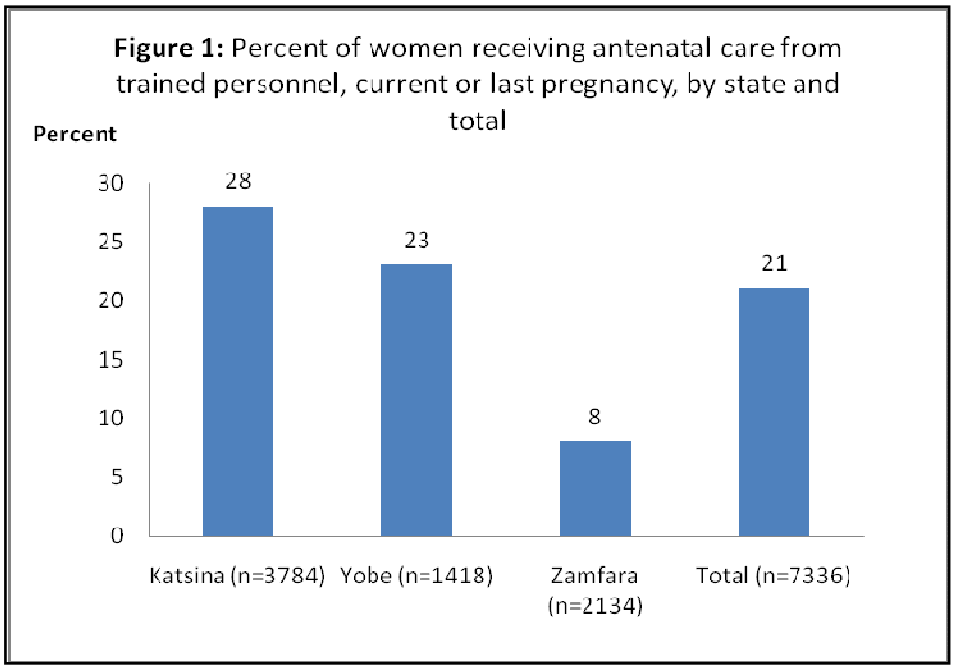
Questionnaires were translated into the local language (Hausa) in order to ensure clarity and standardisation of questionnaire administration. Interviewers were trained on dialects and pronunciation of local terms before conducting the interviews in April-May 2009.

Findings

Six key indicators were calculated as summarised below. The results reported here are preliminary and may change slightly when we complete the more rigorous analyses after more thorough data cleaning.

Antenatal care

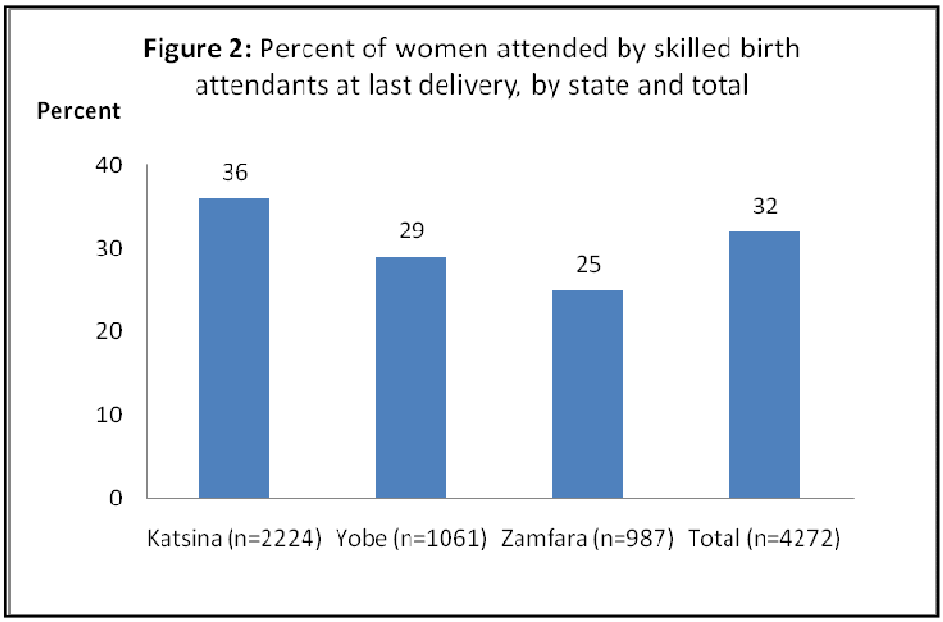
Antenatal care services can help ensure both healthy pregnancies and safe deliveries. Figure 1 shows the percentage of women who received antenatal care (ANC) by trained personnel during their current (at the time of the survey) or last pregnancy. This was calculated as the percentage of women who received <u>any</u> antenatal care by a doctor, nurse/midwife, health extension worker or other health facility personnel, or a trained traditional birth attendant (TBA). These figures includes all pregnancies regardless of place of delivery.



Note: The sample sizes reported in brackets are for all women responding to the question.

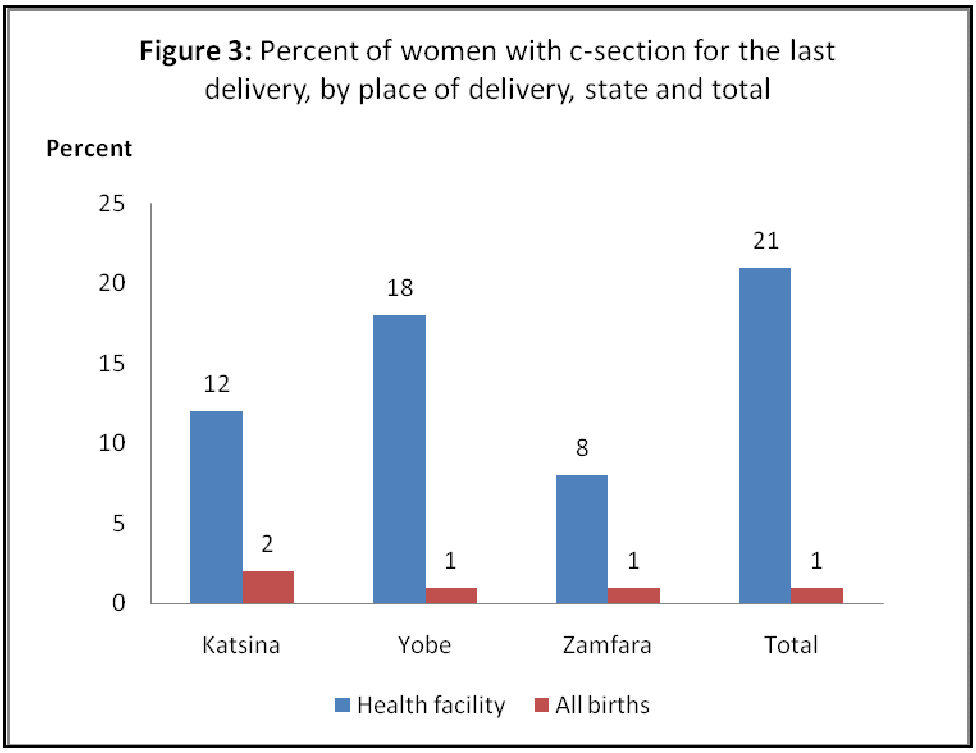
Assistance and medical care at delivery

Another important component of efforts to reduce health risks to mothers and children is increasing the proportion of women who give birth in facilities where medical intervention is available. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother and/or the baby. Respondents were asked to report the place of birth of their last born child if born within the last five years (Figure 2). The results were calculated as the percentage with deliveries attended by a doctor, nurse/midwife, health extension worker or other health facility personnel, or a trained TBA, for births at all facilities.



Caesarean section at birth

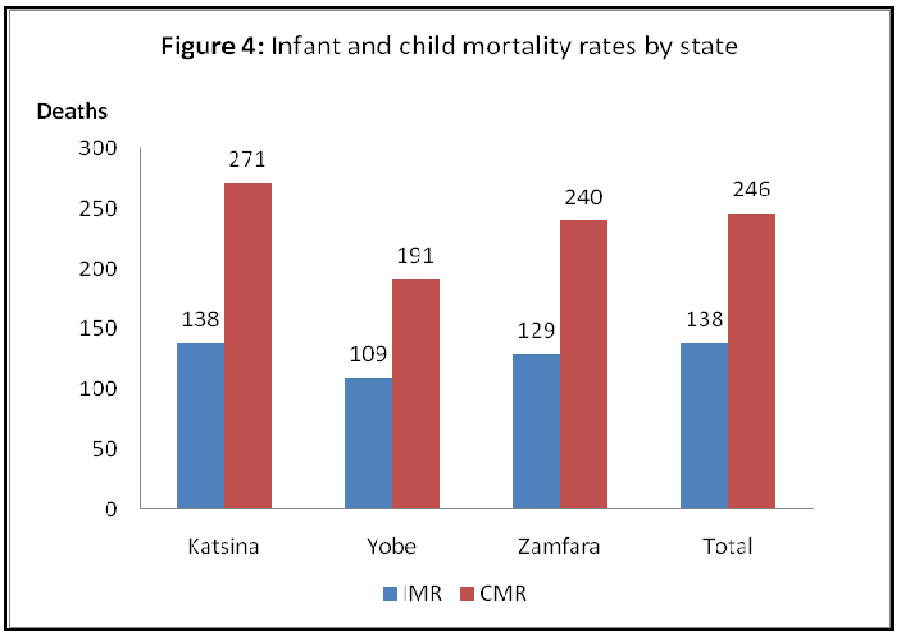
The percentage of pregnancies with delivery by caesarean section (c-section) were analyzed in two categories: percentage of c-section at any health facility and percentage of c-section of all deliveries.



Infant and child mortality

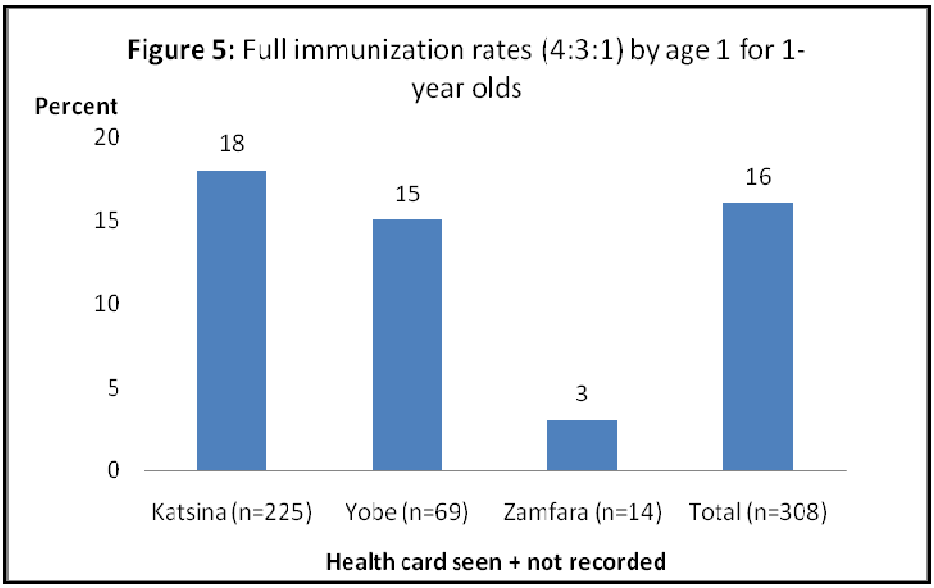
Estimates of infant and childhood mortality are based on information from the birth history section of the questionnaire administered to individual women. For each birth reported, more detailed information was then collected on the child's sex, age in completed years, whether the child was still alive, and age at death if applicable.

In this report, infant mortality rate (IMR) is defined as deaths among children before reaching age 1 (per 1,000 live births) whereas child mortality rate (CMR) is defined as deaths among children before reaching age 5 (per 1,000 children). It is important to note that, amongst other factors, the quality of mortality estimates depends upon the completeness with which births and deaths are reported and recorded.



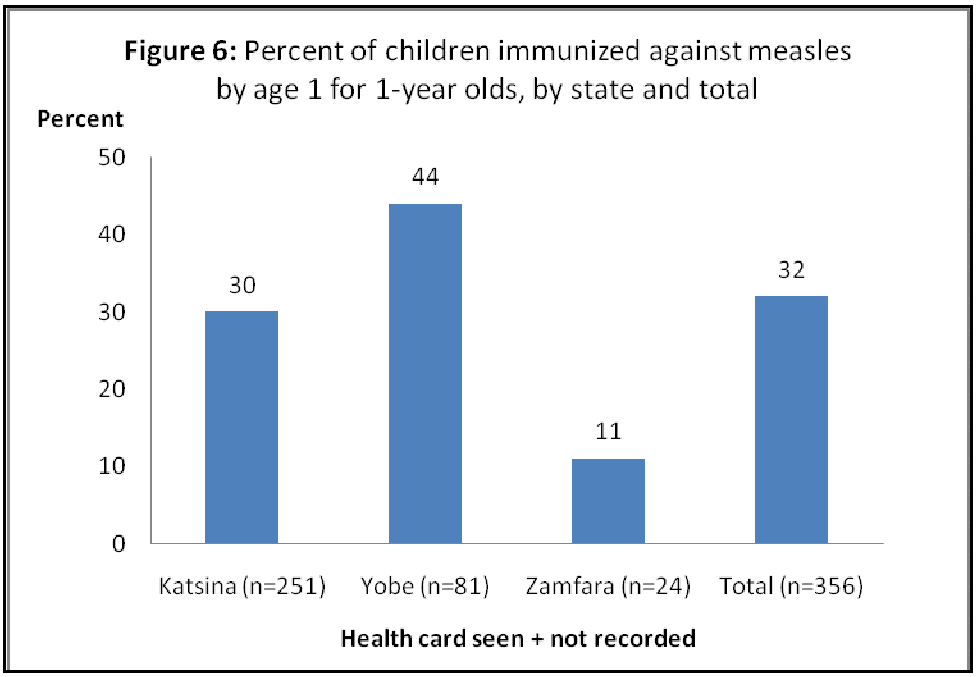
Full immunization by age 1

To evaluate efforts to encourage women to immunize their children, the baseline survey collected information on immunization coverage for all children born in the five years preceding the survey. Consistent with the standard Nigeria Expanded Programme of Immunization (EPI), infants are considered fully vaccinated based on the 4:3:1 vaccination rate (plus BCG): Infants receiving 1 BCG, 4 Polio (including 0 Polio), 3 DPT, and 1 measles by age 12 months. Here, immunization rates are calculated based on immunizations recorded on the child's immunization card (as read by the interviewer) plus those immunizations given to the child but not recorded on the card, as reported by the mother. Immunizations reported only by the mother without a card were not included.



Immunization against measles by age 1

Figure 6 presents information on children born within the last year who received a measles immunization before their first birthday. This information is also calculated based on two sources of information: (1) health card seen and measles vaccination recorded plus (2) health card seen, and measles vaccine reported as given by the mother but not recorded on the health card.



Conclusion

The baseline survey provides an opportunity for generating a number of indicators that can be used to gauge the impact of the project in the near future. This report focused on six indicators that are crucial to assessing the direction and impact of the project. To a large extent, the results show very low proportions of women receiving ANC from trained personnel, low proportions of women attended by skilled birth attendants during delivery, very high infant and mortality rates and very low coverage of immunization against the vaccine-preventable diseases. There are some variations in the selected indicators across states, with Zamfara generally ranking lowest. These results challenge the PRRINN-MNCH project to intensify efforts to increase essential care services to all mothers and children in the focal areas.

Health Management Information Systems (HMIS) Baseline Studies Summary – Zamfara

Introduction

In 2007, data quality assessment (DQA) was conducted for the PRRINN project and it revealed a very weak health management information system (HMIS). With the advent of the MNCH component, a need was identified to assess the HMIS in a broader and comprehensive manner in terms of instruments, infrastructure, processes and flow, human capacity and information use in each state. This situational analysis was designed as a comprehensive evaluation of the HMIS in the PRRINN-supported states. This assessment adopted a broad perspective that involved evaluating the existing policy framework, planning and budgeting/finance, infrastructure, processes, data flow, data quality and human resources. The aim of the assessment is to inform plans for HMIS strengthening over the medium to long term.

The project was conducted in two phases. First, the planning phase involved desk review of existing HMIS assessments and materials, tool and methodology design and project management. The tools were piloted in Katsina and revised before implementation. Secondly, the HMIS assessment tool was applied in Zamfara. The national consultants assessed the state level while three teams over two days, assessed one LGA and three HFs each per day. This made a total of six (6) LGAs and eighteen (18) HFs. Key informant interviews were also conducted to gain insight from different perspectives and explore key issues in depth.

Findings

The analysis revealed that there have been remarkable efforts towards computer-based health information systems in Zamfara. Most local government M&E officers have access to a computer with the DHIS installed. A majority of M&E officers interviewed use the software to capture data and report these electronically. However, the dataset captured at present is limited to immunisation indicators. Nevertheless, plans are underway to expand the dataset to incorporate the NHMIS MDS. Lack of adequate resources is a major constraint in strengthening the HMIS. This is detailed below.

State HMIS

a) Policy and planning framework

There is a national policy on HMIS comprising the goals, priorities, main directions and structure that are suited to the social needs and economic conditions in the different States and this forms part of national, social and economic development policies. Copies of this policy were found to be present at the state level in Zamfara. However, these policies need to be translated through various stages of planning at the state and local levels into strategies to achieve clearly stated objectives.

b) Resource levels

The state has a budget for HMIS. However, the inadequacy of this budget for HMIS activities means reliance on donor assistance for carrying out core HMIS functions. The HSDP had supplied computers and accessories to the state and LGAs. Some of these are no longer functioning, mostly due to lack of maintenance. The DPRS states that the state and the LGAs signed a MoU, which clearly defined the role of the recipient local governments as that of the maintenance of supplied hardware. But this support has been poor.

c) Data cycle

Data collection is severely hampered by the general lack of data collection tools. The dataset currently in use focuses on immunization data and plans are underway to expand this to include

data elements for maternal care and then the national HMIS requirement. Quality is still low as reported data is mostly incomplete and inconsistent. HMIS officers at state level do not have the capacity to collect data from LGA M&E officers because of inadequate transport support.

LGA and Facility HMIS

a) Policy and planning framework

The HMIS policy document is fairly well known. Half of the LGAs visited had a copy of the policy. Generally, HMIS activities are not planned for and when planned for, are rarely carried out.

b) Resource levels

- The insufficiency of funds has significant implications mostly at facility level.
- *Infrastructure*: The inadequacy of space at HFs reflects the endemic problem of inadequate resources. Computers and printers were widely found at the LGAs in Zamfara – five (5) out of the six (6) LGAs visited had a functional computer system. The HMIS software, DHIS, is in use at LGA level (five out of six LGAs) and three LGA M&E officers said they send data electronically (DHIS export).
- *Finance*: HMIS/M&E activities at LGA and facility levels are poorly funded. There is poor understanding of the need to factor HMIS into the budget.
- *Human Resources*: Staff are inadequate in number and skill at both LGA and facility level. Not much has been done to cascade training to HF staff in the respective LGAs.

c) Data cycle

- *Collection tools*: There is insufficient supply of forms resulting from a lack of a mechanism to ensure their sustained supply. There is also the presence of multiple forms from vertical systems – not designed within the routine HMIS - that increase the burden of data collection at the facility level.
- *Quality*: In five LGAs, the reporting rate was about 81%. In only one LGA was it found that no health facility within the LGA reported data for the previous months. All LGAs have some mechanism for ensuring the consistency and completeness of data.
- *Analysis*: Data analysis is generally poor at all levels. There is very poor use of graphs. At the LGA and facility levels, analysis is chronically poor including the use of monitoring charts. Immunization data is generally the most analyzed because of the graph template provided for the assessment of immunization targets.
- *Dissemination, use, flow and feedback*: Dissemination of information is a challenge and very few facilities/LGAs summarize their statistics. There is currently no yearly or periodic publication. Collection and use of data is principally centrally- (state-) driven. There is poor use of data at LGA and facility levels. Data flow is well coordinated in Zamfara as there is one central coordinating unit – the HMIS – for data from primary and secondary healthcare facilities.

Recommendations

- Convene health data consultative committee (HDCC) to:
  - formulate state HMIS policy and planning guidelines
  - commit the state and LGAs in maintaining the computer-based HMIS
  - strategise on how to expand the current dataset to incorporate the MDS contained in the NHMIS
  - address and resolve shortage of HMIS forms

- Through strong advocacy, HMIS should be allocated the prescribed 0.5-1% of the health budget at both state and LGA level.
- The state HMIS team and LGA M&E officers should be re-trained on the HIS and DHIS foundation course with particular emphasis on analysis and presentation.
- Training should be conducted on HIS and DHIS foundation course for LGA M&E assistants. The HIS foundation course should be cascaded down to all health workers at PHCs and HROs/HRAs at secondary facilities.
- Provision of appropriate filing cabinets to maximise limited health record space in PHCs.

Demand Side Barriers to Utilization of MNCH Services Baseline Study – Zamfara

Introduction

A rapid social assessment of the factors undermining appropriate home-based care of pregnant women, new-borns and children, and timely utilization of MNCH services was undertaken on behalf of the Ministry of Health (SMOH) and State Primary Health Care Development Agency (SPHCDA) in Zamfara in January 2009, supported by PRRINN-MNCH. The aim of the exercise was to improve understanding of the MNCH challenges in the state and to support local stakeholders to begin the process of identifying potential solutions.

The rapid assessment exercise was carried out in three local government areas (LGAs) in the three senatorial districts of Zamfara. The LGAs were: Gummi in Zamfara West Zone; Birnin Magaji in Zamfara East Zone; and Tsafe in Zamfara central Zone. The fieldwork involved interviews with community leaders, including traditional leaders, and interviews and focus group discussions with married men, women of reproductive age, older women, traditional birth attendants, and women's group leaders. Health facilities and referral hospitals were visited and meetings held with Health Department representatives.

Findings and Implications

Cultural practices

While pregnancy was highly valued in the fieldwork communities, women, young and old alike, reported that they were not usually given special care or attention while pregnant. Women continue to shoulder their everyday responsibilities unless and until they are ill, and are not given special foodstuffs. Within Hausa-Fulani tradition 'weak women' tend to be a target for mockery and this, combined with poverty, and the practical difficulties associated with trying to single out a pregnant woman for attention within a polygamous household, explains the **tendency to down-play pregnancy**. This leaves women at risk of poor nutrition and over-work.

The **preference for home delivery** was widespread, if not universal. The reasons cited were confidentially and privacy at home, and because delivery was – most of the time – a 'normal experience'. Respondents also argued that fear of incurring large out-of-pocket expenses in a health facility acted as a further impetus to deliver at home. The fact that preference for home delivery is so deeply engrained implies that progress towards promoting institutional delivery for normal births is likely to be slow (and should therefore be seen as a long-term agenda).

The belief that women should not cry or shout out during labour, no matter what pain they find themselves in, was widespread. If women fail to adhere to this, they are considered weak and become figures of ridicule. This **resolve to manage labour alone** without recourse to assistance or fuss leaves women susceptible to life-threatening delays when a complication occurs. A slightly more lenient stance was taken in relation to young women who were considered to need more care, not because they were felt to be more at risk of developing a complication, but because they were inexperienced about labour and delivery.

As in other northern Nigerian states there are **traditional birth attendants** (TBAs) in some villages in Zamfara, but many are old and a new generation of TBAs has not emerged. These TBAs are said to have special knowledge of Qur'anic verses and herbs and plants of medicinal importance, which they can use to prepare concoctions for expecting mothers and for new-borns. Unlike other parts of Africa, the majority of TBAs in northern Nigeria do not assist women during delivery and are only called after the birth. At this stage they help to cut the cord, bury the placenta and bath the baby and mother. This limited role means it does not make sense to

centre awareness-raising about danger signs wholly around TBAs as they are usually not in the vicinity when a maternal complication occurs. A whole-community approach to awareness-raising on danger signs makes more sense in this context.

It is common for women to be bought meat and other special foods for several days after delivery. The **care of women after delivery** contrasts with the lack of care given during pregnancy, and is something that any awareness-raising intervention on maternal health can focus on as a positive approach.

Two practices – **consumption of large quantities of potash gruel and taking hot baths** – were said to be common after childbirth. Traditional hot baths, where women sit in or splash hot water over themselves for up to forty days after delivery, are thought to restore women's strength. However, within western medicine they are thought to be a contributing factor to the high rates of peri-partum cardiac failure among Hausa women in northern Nigeria. While the gruel is said to be very pleasant to eat, it has been associated in western medicine with increased strain on the heart. In combination with hot baths and underlying health problems such as anaemia and hypertension, the consumption of potash gruel has been associated with cardiac failure. Awareness-raising on the dangers associated with both these practices is likely to be more successful if their positive aspects – the emphasis on feeding women foods they like after delivery and regular bathing (but with lukewarm water) – are promoted.

New-borns were said to be 'precious gifts from God' who should be given adequate care. Often there is active management of the **baby's cord stump** until it falls off. This might involve warm compresses or applying herbal concoctions, both of which could result in infection. Whether or not the child is breastfed immediately was said to depend largely on the TBA's judgement. TBAs were said to perform a physical examination to decide whether the milk was fit for the baby's consumption. For most respondents immediate **breastfeeding** was not practiced – a delay of one or two days is made to allow for "purification" of the breast milk, while babies are given milk from domestic animals and shea butter. This deprives newborns of health-giving colostrum.

Knowledge and understanding of MNCH issues and services

There was a general belief that there is no need to have a baby checked by a medic after a successful home delivery. Almost all respondents indicated that **post-natal care (PNC)** was only necessary if there were signs that a child or its mother were in danger. Furthermore, in a context where women adhere to a lengthy period of resting and seclusion after delivery and do not usually move out of the community, facility-based PNC services are unlikely to be utilised. This presents a challenge for health planners.

Although many male and female respondents were aware of **common complications** such as bleeding before or after delivery, convulsions, retained placenta, prolonged labour and anaemia in pregnancy, some complications were not known or not recognised as a problem. For example, lower abdominal pain and bleeding after childbirth were considered normal, and fever after childbirth was considered a common sign of mild illness but not necessarily life-threatening. Yet all of these can be signs of sepsis and therefore potentially life-threatening. Severe pallor was seen by some as a sign of beauty attributed to pregnancy, and a symbol of general well-being. This **partial knowledge of danger signs** – and partial understanding of their severity– suggests vulnerability to potentially life-threatening delays when maternal complications occur. Although men are usually not present when women are in labour, as key decision-makers about women's health care they need to be aware of the danger signs and what they mean so that they can respond appropriately.

Knowledge of **new-born symptoms of illness and danger signs** was rather muddled, highlighting the importance of increasing communities' knowledge of common health problems and how best to respond. Newborn danger signs were said to include severe pallor, darkened skin, prominent veins on the abdomen, inability to cry, failure to suckle, excessive crying, difficulty breathing, and 'high fever'. These were variously associated with evil spirits, 'natural causes', or in many cases respondents did not know the cause. Beliefs about the causes of illness influence ideas about the most appropriate remedy (e.g. a spiritual remedy will be sought first if evil spirits are believed to have caused an illness). This introduces a delay in getting a new-born to a health facility promptly.

Treatment seeking patterns and barriers

Health-seeking behaviour in the event of a maternal complication was complex. In all the communities visited there were up to five different sources of assistance and treatment open to women and their families: TBAs (who could provide both herbal and spiritual remedies), Mallams (spiritual remedies), traditional healers (herbal remedies), patent medicine vendors, hospitals and health centres. Most respondents reported that they would use a combination of the informal sources of health care first, resorting to formal health care only once other options had been exhausted. **Convenience and cost** were the primary drivers behind these choices. MNCH services were reported to be grossly inadequate in the fieldwork sites. Respondents cited long distances to a functional health facility, inadequate staffing, long waiting times, poor staff attitudes, lack of female providers, health workers' poor knowledge, the patient's lack of familiarity with hospital environment, and inadequate supplies and equipment, as factors that delayed the decision to seek care in the formal sector, and which encouraged use of local providers who were cheaper and confidential, and could deliver services 'to the doorstep'.

There was a high level of acceptance of the value and usefulness of **antenatal care** (ANC). However, whether or not women actually utilised services was said to depend on a range of factors, including poverty, proximity to a health facility, long waiting times, and concerns about being seen by a male health provider. The implication was that if ANC services were available 'on the doorstep' and provided by the right type of provider, many more women would go. The decision about whether or not women go to ANC is usually taken by her husband, highlighting the important role that men play as gatekeepers to women's health. This highlights the need to treat men as a key target group for any community mobilisation around MNCH issues.

A **multitude of physical access barriers** contribute to delays in transferring a woman with a complication to a health facility. These include difficult terrain, seasonal lack of connectivity and lack of transport options, especially at night. Many of the communities were only visited by commercial drivers once a week on market day and had to rely at other times on oxen and carts, motorbikes and donkeys, which are either unsuitable for a woman experiencing a complication or are extremely slow. This highlights the importance of working with communities to devise locally appropriate, sustainable emergency transport options.

Lack of affordability of emergency maternal health care was said to be a major cause of delays in seeking appropriate treatment. Many households in the fieldwork sites were reliant on annual sales of agricultural produce, with male under-employment common at other times of year. Paying for health care was said to result in households drawing down their assets or being indebted, resulting in a deepening of poverty. Addressing the high cost of emergency health care requires action on a number of fronts. The feasibility of introducing free or subsidized emergency maternal health care services requires consideration by policy-makers. At the same time communities need to be supported to devise their own solutions to affordability issues, such as establishing community emergency loans and savings schemes.

Appendix 1

Acronyms and abbreviations

ANC	Antenatal care
BCG	Bacille Calmette-Guérin (vaccine against tuberculosis)
BEOC	Basic Essential/Emergency Obstretic Care
CBOs	Community Based Organizations
CEOC	Comprehensive Essential Obstretic Care
CHEW	Community Health Extension Worker
CSO	Civil Society Organization
DfID	Department for International Development
DHA	District Health Authority
DHIS	District Health Information System
DPT	Diphtheria, pertussis (whooping cough) and tuberculosis vaccine
DRF	Drug Revolving Fund
EDP	Essential Drugs Programme
EOC	Essential/Emergency Obstretic Care
FMoH	Federal Ministry of Health
GAVI	Global Alliance for Vaccines and Immunisation
HDCC	Health Data Consultative Committee
HF	Health Facility
HMIS	Health Management Information System
HRH	Human Resources for Health
HSR	Health Sector Reform
ICC	Inter Agency Coordinating Committee
IFAD	International Fund for Agricultural Development
IPD	Immunization Plus Days
IMCI	Integrated Management of Childhood Illnesses
LG/LGA	Local Government/Local Government Area (or Authority)
LSS	Life Saving Skills
M&E	Monitoring and evaluation
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
MLM	Mid-level manager
MNCH	Maternal and Newborn Child Health
MoH	Ministry of Health
MOU	Memorandum of Understanding
MSP	Minimum Service Package
MSS	Midwifery Service Scheme
NGO	Non-Governmental Organization
NIA	National Immunisation Advisor
NPHCDA	National Primary Health Care Development Agency
NPI	National Program on Immunization
PATHS2	Partnership for Transforming Health Systems2
PHC	Primary Health Care
PNC	Post-natal care
PPRHAA	Peer Participatory Rapid Health Appraisal
REW	Reaching every ward
RI	Routine Immunisation
SBA	Skilled Birth Attendant

SDMA	Social Development and Mobilization Advisor
SDSS	Sustainable Drug Supply System
SEEDS	State Empowerment and Economic Development Strategy
SIA	Supplemental Immunisation Activities
SIACC	State Inter-Agency Coordinating Committee
SMoH	State Ministry of Health
SM	Safe Motherhood
SOP	State Operational Plan
SPHCDA	State Primary Health Care Development Agency
SSMO	State social mobilization officer
SSP	State Strategic Planning
STA	Senior Technical Advisor
STM	State team manager
TBA	Traditional Birth Attendant
TAG	Technical Advisory Group
TFI	Immunisation Task Force (WHO)
TOR	Terms of reference
TOT	Training of trainers
WHO	World Health Organisation

Appendix 2

Participants and attendees at the baseline studies review meeting, Kano 1-2 June 2009

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Appendix 3

Presentations from baseline studies meeting
(available on request)

Outputs
Governance presentation
Human resources presentation
MNCH service delivery presentation
Demography presentation
Sustainable drug supply system presentation
Health management information system presentation
Demand side presentation

States
Katsina state presentation
Yobe state presentation
Zamfara state presentation

Minutes of the baseline studies review meeting