

Innovations to improve access to maternal and child health services at district level: Case studies from Ghana



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Case studies from Ghana**

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MATERNAL, NEWBORN AND CHILD HEALTH

WORKING PAPER

September 2014

Innovations to improve access to maternal and child health services at district level

Case studies from Ghana

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Keywords: Ghana, maternal health, child health, district health system strengthening,
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Foreword: UNICEF UHC working paper series

Persisting health inequities are not only wrong in principle but also in practice as they continue to retard progress towards achieving health goals. Understanding the pathways by which the poor and most vulnerable continue to be left out is essential if we are to move equitably and in a rights-based approach towards universal health coverage (UHC).

In this research project, conducted by UNICEF and funded by the Rockefeller Foundation, the team has investigated how existing knowledge on equity can be captured, synthesised and operationalised as a central component of achieving UHC through an equity lens. This information will be of interest to policymakers in low- and middle-income countries, as well as researchers and stakeholders from civil society and international organisations. The outcomes of this research emphasise the need for an approach that systematically captures, analyses and acts upon equity-relevant information.

We hope this series stimulates debate on how to operationalise equity as a component of district health systems strengthening and serves as a call for increased collaboration to guide evidence-based strategies at sub-national levels. This set of research studies provides information on practical approaches to addressing inequities in health service utilisation. We believe that this will be an important and unique addition to discussions on how to operationalise the Sustainable Development Goals now being designed, as well as how to complete the unfinished agenda needed to achieve the Millennium Development Goals in the short-term. UNICEF hopes that this research will generate widespread discussion within countries and amongst global stakeholders on how to achieve more inclusive and equitable paths to universal health coverage.

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September 2014

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Abbreviations

ANC	Antenatal Care
CHN	Community Health Nurse
CHO	Community Health Officer
CHPS	Community-based Health Planning and Services
CSO	Civil Society Organisation
DHO	District Health Officer
DHT	District Health Team
GEHIP	Ghana Essential Health Intervention Programme
GHS	Ghana Health Service
INESS	Indepth Network Effectiveness and Safety Studies
MNCH	Maternal, Newborn and Child Health
MoH	Ministry of Health
NGO	Non-Government Organisation
NMCP	National Malaria Control Programme
NPRS	National Poverty Reduction Strategy
PNC	Postnatal Care
RDD	Research and Development Division (of the Ghana Health Service)
TBA	Traditional Birth Attendant
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
WHO	World Health Organisation

Introduction

UNICEF is seeking to develop a feasible and contextually appropriate approach to assess both financial and non-financial barriers to maternal, neonatal and child health (MNCH) services at the sub-national level. Equitable access to quality health services lies at the heart of universal health coverage. Despite acknowledgement that a multitude of factors determines access to services, and the subject of numerous studies in public health and health policy research, the focus has often been too narrowly focused on financial access barriers. Differences in access to MNCH services, the determinants of access, and suitable approaches to equally address non-financial access gaps have been systematically explored in the UNICEF research project “Support for Universal Health Coverage with equity through health system reorientation and strengthening” supported by a grant from the Rockefeller Foundation (Grant no. 2012 THS 319).

One component of this project was a field study conducted in Ghana in February 2014. The objective was to explore the feasibility of a mixed-methods approach, using qualitative and quantitative approaches, to assess barriers to access as a means to strengthen the management of health services at the district level in order to improve access to MNCH services. The UNICEF research team conducted interviews with a series of stakeholders in different parts of the country including district health teams, healthcare professionals (at regional, district and community levels), researchers and academics. A workshop was facilitated at the end of the feasibility study to share preliminary results and discuss priorities for future collaborations.

The observed degree of existing capacity and innovation was striking. The feasibility study identified many examples of applied research already in place that focused on access gaps at the district level and innovative ways to address them. Some of this existing research was formal, while other examples were less formal. But, importantly, most research highlighted in this paper was initiated at the local levels.

Many studies were conducted as collaborative projects between a district (or group of districts) and one of the three internationally renowned regional field research centres that form part of the Ghana Health Service (GHS): Dodowa Health Research Centre; Kintampo Health Research Centre; and Navrongo Health Research Centre. Other small-scale projects were initiated at the district- or community-level, and were conducted by the District Health Office staff and health professionals providing frontline services.

Local knowledge and initiatives hold great potential to effectively and efficiently address important access gaps. This collection of case studies showcases just a small selection of recent Ghanaian initiatives that analyse determinants of access to and utilisation of MNCH services in order to address access barriers. Their selection does not represent the variety of initiatives that may be observed across the country, but instead have been chosen as examples of successful local initiatives that demonstrate the prerequisites, scope and potential to strengthen access to MNCH services in Ghana if adopted more widely.

Aim

The objective of this working paper is to spark discussion about how these initiatives may be supported and strengthened in order to close existing access gaps. It presents seven case studies that reflect the breadth of initiatives across different levels of the health system in Ghana.

Case studies: scope and themes

To gather information, a template was developed (Annex 1) and circulated to researchers in Ghana. This was used to help collect standardized information not only on innovative solutions, but also to gain some insights into how local researchers identified access barriers, determined their root causes, and crafted appropriate solutions. The scope of studies summarised below reflects the diversity of barriers found by local researchers.

Case Study 1 describes how the annual performance reviews of MNCH services are used to communicate information on achievements and challenges in service provision across administrative areas - both horizontally and vertically - and thus contribute to evidence-based decision making. The Ghana Health Service has routinely monitored performance since it was founded in 1996 and the recent annual performance reviews have highlighted innovations at the district level where services are primarily delivered.

The Research and Development Division (RDD) of the GHS coordinates the activities of the three well-established field research centres as well as conducts its own research. **Case Study 2** describes first steps to develop the capacity of regional and district teams to conduct operational research. The initiative aims to narrow the existing capacity gap by intensifying supportive collaboration between research institutes and health staff at sub-national levels.

Case Study 3 illustrates how policy-relevant local evidence can be generated through close collaboration between researchers and health staff. It focuses on the study of safety and effectiveness of antimalarial drugs in two different districts.

An example of a successful initiative at the district level is presented in **Case Study 4**, which reports the outcomes of a community 'durbar' where opinion leaders and health staff engaged in dialogue with breastfeeding mothers and pregnant women.

Case Studies 5 and 6 illustrate how evidence reviews and community dialogues can guide the development of effective interventions to address the lack of fit between community needs and the provision of MNCH services. Both cases conclude that whilst quantitative data (e.g. data collected at health facilities) can help identify certain problem areas, complementary qualitative data are needed to understand root causes in order to develop locally appropriate solutions to these problems. The interventions summarised in Case Studies 5 and 6 are examples of local initiatives that have contributed to reducing the access gap by increasing the acceptability of MNCH services. These examples underscore

the importance of local knowledge for successfully reducing barriers to access, taking into account both supply- and demand-side issues.

The final case study (**Case Study 7**) highlights the need to pay appropriate attention to service provision not only in rural areas but also in urban settings, where over half of the Ghanaian population resides. This case study describes the establishment of 15 community-based health and planning services (CHPS) zones in a municipal area within the Greater Accra Region. Again, this case study emphasises the benefits of collaboration between a range of different stakeholders engaged in the design of evidence-based interventions.

Indeed, these case studies should not obscure the fact that there remains a significant access gap to MNCH services that needs to be addressed, as shown in the country's most recent health statistics. Yet, the case studies presented in this collection reflects the collaborative and innovative spirit that exists in health policy and health service provision across Ghana. In raising the profile of such initiatives, it is our hope that inspiring lessons will be learnt from these cases, and further innovation will be kindled at the district level to strengthen the Ghanaian health system and achieve universal health coverage goals.

Case Studies

Case Study 1: Performance reviews of MNCH service delivery at district, regional and national levels in the Ghana Health Service

Background

The Ghana Health Service was established in 1996 by the Ministry of Health to implement and manage health service delivery, particularly primary health care, at the regional, district and sub-district levels in line with national health policies. As part of this mandate, the Ghana Health Service routinely monitors health system performance in terms of service quality and utilisation at all levels in order to understand if progress is being made toward the strategic objectives of the Health Sector Medium Term Development Plan 2010-2013. Specifically, the objectives of this plan are:

- To bridge equity gaps in access to health care and nutrition services, as well as to ensure sustainable financing arrangements that protect the poor
- To improve governance and ensure efficiency and effectiveness in health service delivery
- To improve access to quality maternal, neonatal, child and adolescent health services
- To intensify promotion and control of communicable and non-communicable diseases and to promote a healthy lifestyle
- To strengthen institutional care, including maternal health service delivery

This annual performance review was instituted as part of the sector-wide approach (SWAP) initiative. The performance reviews aims to ensure that progress reports as part of this initiative are accurate, timely and transparent, and that the Ghana Health Service (GHS) as a whole is making progress towards its mandate. The review is held at all levels of service delivery – from the lowest level (sub-district) to the national level – and the GHS aims to use this review process to identify innovations at district level in MNCH service delivery, as well as any areas of weakness that need to be addressed.

Objectives

This case study describes this annual performance review process, and its focus on inclusiveness, transparency and district-centred approaches in order to position the review of local service delivery performance as a cornerstone to achieving national targets. Importantly, this review process enables districts and regions to highlight their innovations in service delivery in areas of national strategic importance, and to help identify district-level needs for special attention.

Programme description

The annual performance review is held at all government levels (e.g. from sub-district to national). The process starts at the Budget and Management Centres of each health facility, sub-district and district where health service utilisation is examined using annual reports, targets and achievements. This

analysis also includes a review of trends over time for at least a 3-year time period. Indicators assessed are the sector-wide indicators captured under the five strategic objectives as previously described.

District-level reviews First-level collation of these data is conducted at the district-level. District Health Teams synthesise findings from sub-districts, district hospitals and the district health administration to report on overall district performance in trends and levels of health service utilisation in their administrative area. This review also includes a district performance hearing session, which is a forum that allows each stakeholder (including private providers) to present an account of their performance and to highlight key challenges in service delivery implementation. A district's performance is judged based on the sector-wide indicators and its performance is benchmarked against other districts in the same region. Building on the sub-districts' presentations and stakeholder feedback, districts subsequently develop strategies to correct any performance lapses. These initial strategies are further refined during the district planning process as part of a broader situational analysis. At the end of this process, a district report is developed and submitted to regional authorities for review (see below).

Regional-level reviews Second-level collation of these data is conducted at the regional level. District reports are submitted to regional health authorities, and their review process also includes hearing sessions from all stakeholders. This forum includes District Health Administrations, district hospitals, regional hospitals, training institutes, and regional health authorities, among others. National teams are also engaged at this level and may include national statisticians, policymakers, as well as clinical and public health specialists.

National-level reviews Third-level collation of these data is conducted at the national level. During the first quarter of the next year, a meeting is held with senior managers of the Ghana Health Service to review regional and national performance of the past year through a series of regional and divisional presentations. The Ghana Health Service Council – the 12-member council or governing body of the GHS– also attends these national meetings. These reviews form the basis for developing the Ghana Health Service Annual Report.

In addition to this national hearing session, there is also an independent review of the health sector by a team of outside experts. The purpose of this independent evaluation is to review the performance of the health system as a whole including its monitoring and evaluation functions. The data and presentations submitted through the annual review process feeds into this independent evaluation.

Results and discussion

The annual performance review is an integral process for the GHS to monitor health service delivery performance at all levels, and particularly implementation challenges at local levels where services are primarily delivered. The process itself is designed to be district-centred, transparent and inclusive among stakeholders, which is important to ensure all levels of the GHS and all health partners understand their vital role in achieving national priorities for health service delivery.

Evidence-based planning. The annual review process allows the GHS to monitor progress toward achieving strategic objectives, and to help pinpoint sectors or areas that need additional attention in

order to improve service delivery performance. This process, in turn, provides evidence to inform planning and budgeting for health sector strategies and activities in subsequent years in order to sustain gains or make additional progress in certain areas.

District-centred approach. The review process starts at the lowest service levels in order to highlight innovations that districts bring to bear on implementation of national priorities, as well as to identify regions or districts that need special attention in specific areas.

Inclusive process. The annual review process is an example of an inclusive approach that engages stakeholders at all levels of service delivery, as well as partners outside the Ministry of Health (e.g. civil society organisations and research institutions). For district and regional authorities, this approach provides an exceptional forum at these levels to share implementation innovations and challenges. This also provides an opportunity for districts to share experiences and lessons learned in health service delivery that could be replicated in other areas. The inclusive process also engages these lower service delivery levels in national priorities and motivates district and regional health teams to improve performance in line with strategic objectives. Partners, research institutions and other stakeholders participate in forums to learn from district and regional experiences, as well as to provide guidance on how to improve performance from their perspectives. Research institutes are also involved in the annual independent evaluation of overall health sector performance, and this activity generates further evidence to inform future health sector plans and budgets.

Wide dissemination. The culmination of the annual review process is the convening of the Annual Health Summit, which is organised by the Ministry of Health to present findings from this review process. This forum includes all development partners, CSOs, major NGOs and other relevant stakeholders. Regions and districts document their performance in reports that are shared with stakeholders at the sub-national levels for continuous monitoring and feedback. The Annual Ghana Health Service Performance Report is prepared based on this process, which is circulated to all stakeholders in the health sector.

Conclusions

The Ghana Health Service annual performance review is an evidence-based process to monitor health service delivery at all levels starting at the district level. Through its district-centred and inclusive approach, the annual performance review process itself highlights innovations at district level in health service delivery and helps to identify districts or regions in need of special attention.

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Case Study 2: Research capacity building at district and regional levels in the Ghana Health Service – reorienting research to solve local MNCH service delivery issues

Background

The Ghana Health Service (GHS) has three active and well-organised research centres that have a broad research focus – from demographic surveillance to specific health-related research projects. Established in 1994 the research centres include: (1) Navrongo Health Research Centre (2) Kintampo Health Research Centre and (3) Dodowa Health Research Centre. The missions of these research centres are to provide national and international leadership in conducting quality research to address health challenges and to produce evidence for health policy, planning and service delivery.

In addition, research is also separately conducted by the Research and Development Division (RDD) located in the national offices of the Ghana Health Service. This Division not only coordinates the research activities at these three field research centres, but also conducts its own research and undertakes ethics review of all proposed research within the health sector.

RDD has developed a number of new initiatives to further strengthen research capacity within the GHS. For example, over the past year, this Division has organised short-term trainings in research for all individual health staff as part of its commitment to continuous professional development. The Division also received a grant to extend these capacity training activities to regional research teams.

Indeed, the institutional and geographic spread of research centres in Ghana provides the infrastructure for different types of research at district, regional and national levels. There are also high calibre research scientists at each institution to undertake high-quality and credible research for the country.

Yet, operational research capacity of regional and district level health management teams is lagging in comparison. Regions and districts at times engage in research activities, but often they focus on evaluating the impact of interventions and updating routine information through surveys. These research agendas do not necessarily focus on asking and solving everyday implementation issues at local service delivery levels. Moreover, the quality and quantity of district-level research is largely dependent on the individual situated there, and results are not always credible or policy-oriented.

Historically, the GHS has relied on its field research centres or other partners to conduct research that would address implementation problems within the service. Yet, research institutions do not always sufficiently comprehend service-related issues at local levels in order to carry out operational research that is policy and programme-relevant. Strengthened research capacity is needed at district and regional levels to help identify and solve local service delivery challenges through research-based methods. Moreover, there is a general need to reorient health research within the GHS in order to strengthen the scope and amount of high-quality, policy-relevant research to improve health service delivery, particularly for poorest groups.

Objectives

The objective of this programme is to build better research capacity to carry out operational research that provides answers to local service delivery issues that impede the achievement on national strategic priorities. In particular, the research capabilities of the Regional Health Management Teams and District Health Management Teams need strengthening in order to allow them to research and solve everyday implementation problems at local levels.

Programme description

Regional and district teams were identified and selected by the regions and districts themselves to attend research capacity strengthening workshops. These workshops were supported by the RDD and included participation by the three GHS research training centres as well.

Teams attended 5-day proposal development workshop with the aim of developing research protocols that would address everyday implementation challenges in their local areas. Based on these proposals, research teams then collected data within their regions or districts in line with study protocols. Research methods and results were then compiled into a research report and presented during a dissemination workshop. The key components of this activity included:

- Proposal development workshop
- Fieldwork training and implementation
- Data analysis and reporting writing workshop
- Dissemination of findings

Results and discussion

There were a number of positive results that stemmed from these workshops that will help promote operational research in the GHS that is high quality, policy-relevant and centred around district service delivery issues.

Building research capacity at local levels Workshops helped to demystify research to participants and to build capacity at all levels of the health sector. For example, some participants in this workshop (who also participated in previous research training activities) have become researchers with international recognition, while others are policymakers who rely on evidence for decision-making purposes.

Creating demand-led research Study topics developed during this workshop were identified by regional and district teams based on their experiences with everyday implementation challenges. These proposals ranged from specific management problems to disease control issues that would improve local health service delivery in sectors of national strategic importance. This not only strengthened capacity of local health staff to identify research areas based on local experiences, but also provided staff from research centres with insights into the types of operational research questions that need to be addressed.

Supporting research and health staff collaborations These workshops also helped promote collaborations between research institutions and health staff at the district and regional levels, which is important to support future research at local levels. One challenge, however, is the high turnover of health staff at regional and district levels. This means that re-trainings could be needed. Moreover, research is not the main focus of health facility work and participants attending the workshop often had to struggle to balance routine work activities with deadlines for the workshops.

Conclusions

There is a need to reorient research in the Ghana Health Service to focus on operational research questions that are driven by local everyday implementation challenges to service delivery. While Ghana has a number of research institutes and high-calibre researchers, there is less capacity in health management teams at regional and district levels where implementation challenges arise and need to be solved. This set of workshops was an important start for strengthening research capacity at regional and district levels.

Resources

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Ghana Health Service

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Dodowa Health Research Centre

<http://www.dodowa-hrc.org>

Kintampo Health Research Centre

<http://www.kintampo-hrc.org>

Navrongo Health Research Centre

<http://navrongo-hrc.org>

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<http://www.nuffic.nl/bestanden/documenten/over-de-nuffic/publicaties/rawoo-publicaties/ghanaian-dutch-programme.pdf>, accessed September 2014.

Case Study 3: Research and district health staff collaborations to extend patient care into communities – an example of monitoring adverse drug events in Shai-Osudoku and Ningo-Prampram Districts

Background

A number of clinical studies have established the initial safety and efficacy of new anti-malarial drugs when delivered in controlled study trial contexts [Zwang J et al 2012]. But there is limited information on the effectiveness and safety of these medicines delivered in routine practice through health systems in different African settings. This is a major evidence gap in the drug development pipeline, which can significantly delay access to and uptake of new treatment advances. In fact, due to this lack of evidence, new drugs are often offered for national policy decisions in sub-Saharan African countries with as few as 6,000 patient exposures and no long-term patient follow up [Talisuna A et al 2006].

National malaria control programmes (NMCPs) need safety and effectiveness data of drugs delivered outside a study trial context before widespread use of such treatments can be justified. Yet, these types of long-term effectiveness studies are difficult to implement in many African settings since they require robust and extensive surveillance systems that reach beyond health facilities into patients' communities and homes. Indeed, weak health information systems in many of these countries pose a significant barrier to generating such evidence.

Starting in 2010, the Dodowa Health Research Centre (in collaboration with the INDEPTH Network and the District Health Teams of Shai-Osudoku and Ningo-Prampram Districts) initiated a study to assess the effectiveness and safety of new malaria treatments when delivered in routine clinical practice in these two districts.

This project is highlighted here for two main reasons. First, this case study exemplifies a successful collaboration between researchers and district health staff to implement a novel programme to monitor adverse drug events in communities. Second, it also demonstrates an innovative method for extending routine surveillance systems into communities for long-term patient follow-up.

Objectives

The objective of this research was to reduce the time gap between licensure and acceptance of new anti-malarial drugs by providing safety and effectiveness data from routine clinical practice that would help inform global and national drug policies. Moreover, this case study exemplifies an innovative approach for extending routine surveillance systems into communities to monitor patient care and adherence to treatment regimens, which was collaboratively implemented by researchers and health staff in these districts.

Programme description

This research was part of a multi-centre safety and effectiveness study conducted in Burkina Faso, Ghana, Mozambique and Tanzania as part of the INDEPTH Network Effectiveness and Safety Studies

(INESS). This platform is used to provide safety and effectiveness information on drugs and vaccines to enable countries to adopt more rational and timely national drug policies, including policies for anti-malarial drugs.

Initial meetings were held in 2009-2010 in these study districts with various international and national stakeholders. These meetings aimed to sensitise health staff and communities to this study, its objectives and plan for implementation. Subsequent to these meetings, there was a mapping of the anti-malarial drugs available in 53 pharmacies and chemical shops within these districts. This mapping found 13 anti-malarial drugs and 54 different brand names available in the two districts alone, including the most popular brands of artemisinin-amodiaquine, artemether-lumefantrine, sulphadoxine-pyrimethamine, and artesunate monotherapy.

By end-2011, study activities were successfully integrated into routine health system practices in the two districts. To follow up patients for adverse drug events, trained field workers were stationed in each health facility within the two districts, and recorded patient demographics, medical information and medications prescribed. These field workers would then follow up with patients on days three and seven after clinic attendance either through home visits or by phone. They asked about any adverse drug events and also monitored compliance with treatment regimens. This information was recorded into standardised data collection forms.

In addition, 'SMS for Life' was implemented in the two districts as part of the study platform. 'SMS for Life' uses mobile devices and mapping technology as a means to monitor anti-malarial drug stock levels in facilities with the aim of reducing or eliminating stock-outs of essential medicines. Specifically, health facility managers or district health officers routinely send text messages with facility drug stock information to a central database that then alerts relevant authorities when stock levels are low.

After completion of data collection in 2012 a data synthesis and review meeting was held in Dar Es Salaam, Tanzania that was attended by all study sites in Burkina Faso, Ghana, Mozambique and Tanzania. Study results were disseminated through presentations at international and national conferences, as well as through technical meetings at the district level and in international forums.

Results and discussion

The study conducted in these two districts successfully assessed the safety and effectiveness of new malaria treatments in routine clinical encounters. Specifically:

Evidence-based policies and programmes The mapping work of anti-malarial drugs provided important information regarding the breadth and types of malaria treatments available through pharmacies in these areas. Moreover, evidence generated through the overall project provided much needed information to the World Health Organisation (WHO) in its on-going global monitoring of adverse drug events. For example, the WHO database of adverse drug reactions (Vigibase) contains only 464 reports of all artemisinin-based combination therapies (ACTs), while the INESS sample size made it the largest post-marketing safety study of anti-malarial drugs ever conducted.

Integration of research into routine health systems By 2011, study activities were successfully integrated into routine clinical practice in health facilities and into district health management activities, which was the direct result of collaborations between researchers, health staff and district health managers. One lesson learned, however, was the need to more closely involve health staff from the start of the study in order to further improve collaborations. Health staff did not always fully understand the study objectives, and high attrition rates meant health staff re-trainings were needed.

Enhanced surveillance systems in facilities and communities were developed in these districts and mark an important step towards more general strengthening of surveillance activities at both health facilities and in communities. In fact, this could potentially lead to the development of ‘health observatories’ in these districts. Such platforms could be used to understand the effectiveness and safety of other interventions as well, or to conduct further studies requiring robust and routinely collected health information from communities and facilities.

Moreover, the study was able to recruit and follow up large cohorts of patients for drug safety evaluations at their homes or outside healthcare settings. This community-level information was then integrated with routine health facility records using the Health and Demographic Surveillance System. Cohort Event Monitoring approaches used in this study could be introduced as a methodology to monitor the introduction of new vaccines or other medicines, and to detect any safety issues for quick correction.

Technological innovations were successfully introduced into these districts as part of the study platform, notably ‘SMS for Life’ as earlier described.

Conclusions

This case study exemplifies how researchers and health staff can work together to generate local evidence to inform national policies while also improving patient care, follow-up and monitoring systems at both health facilities and in communities. Indeed, this project generated large-scale evidence on adverse drug outcomes for malaria treatments in these districts. This was done by creating more robust surveillance systems that extended into communities to follow up a large cohort of patients about their medical care, treatment adherence and health outcomes. This platform could also be used more broadly to enhance patient care and follow-up in communities during routine clinical practice, as well as to understand the effectiveness and safety of other essential interventions.

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The Principle Investigator of this multi-country study is Professor Fred Binka. Other Institutions involved in the study in Ghana included the School of Public Health University of Ghana; Dodowa, Kintampo and Navrongo Health Research Centres of the Ghana Health Service; Ghana Food and Drug Authority; and the Ghana National Malaria Control Program. Other partners include the district and national public and

private health care providers, WHO/AFRO, Medicines for Malaria Venture (MMV) and linked pharmaceutical companies. The study received funding from the Gates Foundation through the INDEPTH Network and Technical Support from CDC, Atlanta, Swiss TPH, Novartis, INDEPTH Network.

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Case Study 4: Community dialogues to improve child health and nutrition in West Mamprusi District

Background

Janga sub-district is part of West Mamprusi District in the Northern Region of Ghana. Its population was estimated at approximately 23,000 in 2010. This sub-district includes 23 communities that are widely dispersed, including four that lie across the White Volta and are considered 'hard-to-reach' areas.

Traditionally, diets in these local communities mostly consist of starchy foods (e.g. pepper and ginger) but few proteins. These meals are generally prepared from corn, millet, cassava, or yam and eaten in various forms: whole, paste or liquid. In fact, it's the belief that if a child is given an egg, meat or fish more frequently than during the few annual festivals that are observed in the communities (3 or 4 per year), the child will be destined to be a thief as an adult.

Health teams, therefore, wanted to engage communities in dialogues in order to educate families about the extreme dangers of malnutrition, and to correct misperceptions that hinder the regular intake of proteins and vitamin-rich foods (particularly for children and pregnant women). Health teams also wanted to demonstrate to families and communities exactly how to prepare nutritious foods using locally grown produce.

In the Northern Region, as it is in most parts of Ghana, messages are taken more seriously when they are passed in gatherings from the chief or his spokesman. These gatherings usually begin and end with the blessing or endorsement of the information provided by the chief himself, and is preceded by a drumming session either portraying happiness or sadness depending on the message to be delivered.

Objectives

To conduct community dialogues to promote healthy behaviours, balanced diets and the use of health services by women and children in the sub-district

Programme description

A one-day durbar (or community dialogue) was organised on 19 December 2012 that included 150 breastfeeding mothers, 20 pregnant women, 23 opinion leaders, traditional birth attendants, various health staff and a trained dietician. The community durbar addressed various issues related to nutrition, hygiene and child health in order to promote healthy behaviours and use of health services.

These key messages conveyed during the durbar were developed based on direct observations and conversations with women and families that took place at health facilities. For example, health staff often prescribe the following treatment to malnourished pregnant women or children presenting at health services: "one egg daily for 30 days; come for review in one month". Yet, it is not certain if the

patient will follow this prescription or even return for a follow up visit, depending on if the head of the household approves. Moreover, it is not always clear that men value protein and vitamin-rich foods that are essential for women's and children's health. It was, therefore, decided that a community dialogue (or durbars) was needed to share these important messages with entire families and communities.

Results and discussion

Below is a summary of the content and results of the durbar:

Male involvement: The durbar encouraged men to get involved in the health of pregnant women and mothers. It was recommended that men accompany their spouses to antenatal care visits, deliveries and for sick child care. Moreover, it was emphasised that men as heads of households were responsible for caring for women and children by providing adequate nutrition and promoting healthy behaviours, even during long periods at the farms. For example, men were encouraged not to sell all their fishing catch at once but to reserve some for later consumption in order to promote healthy eating and balanced diets in their families. Indeed, this has been the practice in most parts of the Northern Region – and this advice pertains not only to their catch of fish but even to animals raised at homes. Men were also encouraged to accept meals demonstrated during the durbar (described below) as part of regular family diets and not as special meals for festivities.

Family health care decisions The durbar encouraged early care-seeking for sick children since a child's health status can go from well to catastrophic in a short time period, particularly if infected with malaria or other infectious diseases. It was also recommended that women take the lead in family health care decision-making since they are in close contact with children. This would also help reduce delays in accessing health services for child illnesses, particularly since mothers often had to wait for men to return home to receive permission to seek care. In the past, similar durbars have been used to encourage men to accompany their pregnant wives to antenatal care visits with great success. In fact, there is currently a group of males who regularly meet to discuss issues relating to their pregnant wives, and these men have been more involved in maternal care. We believe that this durbar could potentially have similar outcomes in terms of encouraging men to relinquish health care decision-making to their spouses.

Education and trainings Midwives and community health nurses provided information on the causes and signs of anaemia in pregnant women and children, and how to prevent this condition. For example, it was stressed that children under five years old should eat at least one egg per day as part of a balanced diet for the entire family. Midwives further emphasised the importance of good hygiene practices and proper hand washing techniques. This included how to wash fruits and vegetables before eating, keeping children's fingernails short, and to watch for symptoms of anaemia in pregnant women and children (e.g. pallor of the lips and tongue, weakness, difficulty breathing, abdominal distention and the desire to eat sand or 'pica').

Nutrition The final session was devoted to demonstrations on how to prepare various local foods in ways that are nutritious and easy to manage. At the end of the demonstration, all foods were served

and sampled by participants. All ingredients in the demonstration were locally grown or made, which included: legumes (soya bean, ground nuts, pumpkin seeds); animal foods (meat, fish, herring, eggs and milk); cereals and tubers (millet, guinea corn, rice, maize, yam); vegetables/green leaves (cassava leaves, okra, ayoyo, berese, bra); fruits (mangoes, pawpaw, sibilibi, dawadawa, watermelons); lipids and oils (shea butter, ground nuts, palm kernel oils); sugar and honey. There was also a specific focus on making fortified porridge for children who are being weaned off breast milk.

As a result of the durbar, it seemed that men listened to the messages conveyed by health staff. We will continue to monitor their roles as agents either promoting or hindering better nutritional and health care decisions made for families. Even though the dialogue took place only one time, there seemed to be improved attitudes among men and communities to our nutritional advice. Moreover, women participants requested more frequent durbars throughout the year, particularly to encourage men to accept these meals as part of the family's regular diet. Given limited funds, the plan is to extend our workforce by training enthusiastic individuals in communities to conduct durbars. Ideally, we would like to organize durbars at least four times per year and extend their coverage to all sub-districts in the area.

Conclusions

Durbars are an important opportunity to engage families and communities in dialogues about critical health and nutritional issues, to get feedback on reasons for poor nutritional outcomes and to solicit their input on how to improve the health of pregnant women and children. These community dialogues have great potential to improve health care seeking behaviours for women and sick children, and to reduce anaemia prevalence in the population. This approach could be valuable for other districts as well, and we will need to liaise with partners to help strengthen and extend durbars going forward. We have also encouraged the Ghana Health Service to incorporate these outreach activities into regular budgets in order to make the program sustainable.

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Case Study 5: Evidence reviews and community dialogues to develop interventions to increase use of skilled delivery care in Shai Osudoku District

Background

Shai Osudoku District is located in Dangme West District in the Greater Accra Region, and contains two administrative sub-districts: Dodowa (Shai) and Osudoku. The district population was estimated at nearly 60,000 in 2012, and is widely dispersed with a high level of migration out of the district. This poses a significant challenge to delivering basic social services in this community where great distances between homes and vital infrastructure are coupled with poor road networks. The main modes of transportation are motorbikes, which are relatively expensive and cannot be used by pregnant women near-term or in labour.

Moreover, the population is relatively poor with economic activity largely driven by farming, fishing, crafts and small-scale trading. There are also low levels of literacy and common misperceptions about health issues among the population, which further compounds challenges to delivering health services.

A review of health facility records was conducted in collaboration with Dodowa Research Centre to better understand the extent that maternal health services were used in the Osudoku sub-district. This review showed general low use of antenatal and postnatal care, as well as skilled care during deliveries. In 2012, 420 pregnant women were ANC registrants, but only 70 (11%) of these women in turn delivered at facilities. Indeed, the District Health Team is concerned about the gap between high utilisation of ANC services but low attendance at facilities for deliveries, which has important implications for maternal and child health outcomes.

Objectives

The objective of this programme was to develop interventions based on a review of evidence and by understanding community perspectives that would increase the number of facility deliveries

Programme description

Research and evidence-based interventions. There was a review of health facility records conducted in collaboration with Dodowa Research Centre in order to understand the extent that maternal health services were underutilised in this sub-district. This quantitative analysis was coupled with a qualitative study to explore factors that may prevent women from having supervised deliveries at facilities, despite high use of antenatal care services. This qualitative work was conducted using in-depth interviews and focus group discussions with mothers and pregnant women. Qualitative results indicated various reasons for low utilisation of facilities for deliveries including institutional challenges, as well as cultural and socio-economic factors.

First, there seemed to be misconceptions about childbirth that could prevent the use of supervised deliveries, notably that childbirth is a natural and spontaneous process and that too much preparation

could result in complications. This may have led to a lack of birth preparedness on the part of the pregnant woman. Moreover, some women viewed home delivery as a sign of strength and achievement.

Second, traditional birth attendants (TBAs) seemed to be well respected in communities and embraced for their wisdom, experience and empathy as the preferred delivery option. There may also be stigma among women who disregard TBA services and advice. This preference for TBA-assisted deliveries appeared to be compounded by a perception among women of harsh treatment and verbal abuse by health providers at facilities.

Third, many women noted a preference for squatting positions during childbirth, and this birthing method is not allowed in facilities.

Finally, women described accessibility issues that prevented facility deliveries, such as physical distance to facilities and poor road infrastructure. Women noted that taking motorbikes during labour is not a possibility, which further complicates use of facilities for deliveries.

Based on this evidence, a series of interventions were developed to address challenges identified by communities in order to increase the number of facility deliveries in Osudoku sub-district.

- **Community outreach and engagement** Community sensitisation about skilled deliveries took place with 120 opinion leaders and community members that addressed the importance of ANC, birth preparedness, skilled care at delivery, postnatal care, and various complications that may arise during delivery. These opinion leaders were also asked to act as advocates for use of maternal health services, and to help identify pregnant women for follow-up by midwives. Community health nurses (CHNs) then followed-up with these pregnant women from 30-46 weeks to encourage them to deliver at facilities. CHNs also went to churches in remote communities to create awareness about the need for skilled delivery care and danger signs of birth-related complications.
- **Extending health services to communities** For remote communities, CHNs provided monthly ANC visits at homes based on a convenient time for the pregnant woman. Pregnant women attending ANC services were also given midwives' phone numbers in order to call during labour. Health facility management teams were encouraged to put aside money to cover the cost of transportation for facility deliveries.
- **TBA involvement** Refresher trainings were organised and 30 TBAs participated. Topics included importance of skilled delivery at birth, danger signs for birth-related complications, reasons for referrals to facilities and the importance of trained midwives visiting TBAs.
- **Health staff trainings and customer care improvements** Refresher trainings were organised for 15 providers (4 midwives and 8 CHNs) and included topics such as labour management, newborn care and counselling on danger signs. 30 providers were separately trained in customer care that included topics such as provider-client interactions, time management skills, community communications, and how to receive and treat a client with respect, dignity and

fairness. To further improve mothers' experiences with facility births, rules were changed to allow mothers to choose their birthing position, including squatting. Moreover, women in labour were allowed to bring their relatives into the delivery room for support (patients without family were instead encouraged by midwives or volunteers). Spiritual leaders were also allowed into delivery rooms to pray for mothers and their babies. Renovations were also carried out to improve the facility environment in maternity units in 2 health centres. This included repairing cracks in the walls, changing ceilings, doors and locks, as well as doing necessary plumbing and electrical work. Basic delivery equipment was also procured, such as electric boilers, wooden cupboards and three delivery beds. Finally, mothers with good experiences at facilities were asked to spread their message to community members

- **Financial and non-financial incentives** Mothers delivering at facilities were given a hot beverage and warm chocolate after delivery, and transportation costs were reimbursed when possible.
- **Planning, monitoring and performance reviews** were done formally at two points during the study project to understand CHN challenges and to review monitoring records and clinical practices. These reviews were conducted in the three facilities providing delivery services and included district health staff, facility staff, accountants and health information officers. At the first meeting, for example, it was suggested that providers do more home visits and CHNs were asked to expand follow-up activities to reduce ANC default. A second meeting was then convened to discuss any further challenges with home visits and to share experiences and encourage work. In the interim period between reviews, CHNs were sent weekly text messages as an informal method to improve communications and to get their suggestions or concerns about implementation issues. CHNs and midwives also met quarterly to share best practices and to find solutions to common issues faced in the sub-district.

Results and discussion

This programme was first implemented in July 2012 and is currently ongoing due to initial success. After a one-year implementation period, health records were reviewed to understand if the programme led to increases in facility deliveries. These findings indicated major improvements in ANC registration and use of delivery services at facilities.

ANC registration rose by 14% (218 in June-November 2012) to 248 for the same period in 2013. Registrants from January-November periods increased by over 31% from 348 in January-November 2012 to 459 in January-November 2013. Facility deliveries nearly doubled during the study period – rising from 51 in June-November 2012 to 100 in the same period in 2013. Each of the three facilities that provided delivery services experienced increases during this period. The number of facility births in Osudoku Health Centre rose from 32 in June-November 2012 to 70 during the same period in 2013 – or a 118% increase during this time. In Osuwem and Tokpo CHPS, facility births rose by 67% (9 to 15 facility births in total) and 50% (10 to 15 facility births in total) respectively during this same time period. Among ANC registered women in this sub-district, there was a substantial increase in facility deliveries –

rising from 23% in 2012 to 40% in 2013. Similarly, the number of ANC registrants that had a TBA-assisted birth declined during the study period.

In terms of TBA involvement, the number of TBA referrals increased during the study period – rising to a total of 34 referrals in June-November 2013. Indeed, TBAs had promised health workers to refer cases because there are interventions at facilities that TBAs cannot do themselves, such as treating babies of HIV mothers. TBA involvement was among the greatest achievements of this programme, and may have had the largest impact on results. TBAs appreciated partnering with health facilities, and even started attending religious services with midwives for community sensitisation to skilled birth attendance.

In terms of community sensitisation, community dialogues (durbars) indicated that community members were very receptive to the community sensitisation efforts, and this also helped to increase facility deliveries. Based on this feedback, an important next step is to further involve assemblymen, community mobilisers and other community opinion leaders to help identify pregnant women for CHN follow-up. There are also discussions about asking mothers to stay at the facility for three days prior to their due date in order to avoid transport issues.

Conclusions

This programme has been very successful in increasing the number of facility deliveries, which will further improve maternal and infant health outcomes. These results suggest that targeted, innovative actions combined together can lead to major increases in health service utilisation to improve maternal and child health outcomes.

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Additional resources:

Dodowa Health Research Centre
http://ghanadistricts.com/districts/?r=1&_5&sa=927

Case Study 6: Evidence reviews and community dialogues to develop innovative, targeted actions to improve maternal health outcomes in Gushegu District

Background

Gushegu District is a poor rural district in the Northern Region of Ghana. As of 2010, its population was estimated at over 120,000 and spread across three official sub-districts that contained more than 400 communities [Gushegu DHD 2011 Annual Report]. In fact, most communities in the district are small and widely dispersed with an average of less than 800 people living in each area. This settlement pattern is a major challenge to delivering basic social services in the area given distances between communities and health centres or other vital infrastructure. There is also relatively low literacy among adults despite the availability of numerous primary and secondary schools. This further affects use of basic health services.

The health infrastructure in Gushegu District includes one district hospital, two health centres, 17 operational community-based health planning and services (CHPS) zones, 10 CHPS compounds and 1 reproductive and child health (RCH) clinic. Despite this health system infrastructure, the district has recorded high maternal and infant mortality rates for a number of years. This is a major source of concern to health managers and other district stakeholders, as well as at regional and national levels.

In 2010, there were four pregnancy-related deaths in this district, which rose to seven deaths in 2011 and again in 2012 (DHIMS 2013). The seven maternal deaths recorded for two consecutive years prompted the District Health Directorate to take urgent, proactive steps to reduce maternal.

Objectives

The objective of this programme was to develop interventions based on a review of evidence and through community dialogues in order to reduce maternal mortality rates in the district.

Programme description

Research and evidence-based interventions The District Health Directorate conducted an analysis of various data sources to identify the reasons for maternal deaths in this district. First, health facility records were examined to understand the extent that pregnant women utilised health services, including ANC services and facility births. These data revealed high ANC registration rates, but low patronage of facilities for delivery care. Among women registered for antenatal care, only about one-quarter subsequently delivered at facilities in 2010. Traditional birth attendants (TBAs) conduct most deliveries in this district.

There was also a review of maternal causes of deaths based on clinical audits and community verbal autopsies. The clinical audit revealed that most maternal deaths were caused by the following conditions or complications: severe anaemia; heart failure; hypoglycaemia; puerperal sepsis with severe anaemia; eclampsia; and post-partum bleeding.

Community dialogues were also employed to elicit their perspectives on maternal deaths and how to reduce them. These dialogues provided the following information about maternal deaths and their causes. There seemed to be a general lack of understanding by husbands and families about maternal health services provided at facilities and their importance. Community members noted poor involvement of husbands in their spouse's maternal health care. For ANC registration, respondents described general late ANC starts, inadequate laboratory services to detect pregnancy risk factors, and poor retentive ability of mothers to keep ANC appointments leading to high default rates.

Other issues were also reported during these dialogues, such as poor dietary intake that could lead to anaemia and malnutrition in mothers. In terms of delivery care, there seemed to be misconceptions about the need to deliver in facilities, along with superstitious beliefs and harmful cultural practices. Poor road networks and inadequate transport were noted by hard-to-reach communities as reasons for low use of facilities for deliveries. There also seemed to be reluctance among TBAs to refer difficult labour cases to facilities.

Based on these dialogues, the District Health Team developed a list of challenges grouped into technical, and socio-cultural barriers. For the socio-cultural issues, communities were asked to suggest solutions and prioritise among them using Participatory Rural Appraisal (PRA) pocket voting and a ranking method in the order of minimum cost, effectiveness and ease of implementation.

These proposals led to the following interventions to reduce maternal mortality in the district:

TBA involvement to increase their skill level and promote early referral for labour complications. To this end, refresher trainings were organised for TBAs on pregnancy danger signs and the importance of early referral systems. Regular meetings were also organised with TBAs to encourage them to accompany women in labour to health facilities.

Community outreach and engagement was used to educate communities about the importance of ANC and facility deliveries, as well as to extend the reach of maternal health services into hard-to-reach communities. To this end, health and nutrition education was intensified at ANC visits and in communities in order to reduce misperceptions or superstitious beliefs about maternal health issues, reduce defaulter rates and reduce anaemia incidence in pregnant women. The reach of maternal health services was also extended through home visitations and domiciliary midwifery that included ANC, delivery services and PNC. Outreach laboratory services were also made available in sub-districts with high anaemia rates, transport challenges and long wait times for diagnostic services. Deployment of health extension workers and community volunteers was undertaken to provide further health education and to encourage the use of maternal health services. There was also deployment of transport or ambulance services for remote communities to support referral of critical cases to health centres.

Fostering family and community support was done by conducting community durbars on causes and prevention of maternal deaths to raise awareness among community members. In addition, men were also encouraged to become more involved partners through fathers' clubs. These fathers' clubs served as rallying grounds for male education and participation in maternal health care for their spouses.

Financial and non-financial incentives were provided to TBAs, health staff and pregnant women in order to encourage use of maternal health services. The district used its internally generated funds to provide a number of incentives. For TBAs, they were provided transport grants and half a bar of soap as incentives for early referral, and to accompany clients to health facilities for delivery services. For mothers, they were given hot beverages if they delivered at the facility, along with a baby dress for the child. For health staff that conducted a facility delivery, they were also given a hot beverage. There was also a cash incentive (with support from UNFPA) to any community health nurse or midwife who conducted a home visit for postpartum women within 72 hours of birth in order to check on the health of the mother and newborn.

Strengthened monitoring and surveillance systems were used to track expected delivery dates, remind mothers of upcoming appointments and strengthen observations of women post-delivery for at least 24 hours. To track expected delivery dates, pregnancy registers were instituted to record all pregnancies and their expected due dates in communities. These systems were used to prompt those women close to term to make necessary delivery plans. To remind mothers of future appointments, counting stones were used as reminders to keep future ANC appointments. For example, mothers who were asked to return for ANC in one month would be given 5 pebbles and advised to discard one pebble on each market day (market days are every 6 days). Once she discards the last pebble, the mother should return immediately for the next ANC appointment.

Results and discussion

This programme was first implemented during the latter part of 2012 and continued through 2013. After the implementation period, health records were reviewed to understand if there were increases in maternal health service utilisation during this time. For ANC registration, there was an increase in early initiation of ANC visits and a reduction in defaulter rates during this one-year period. There was also an increase in male accompaniment to ANC visits, which rose from 4,822 in 2012 to 5,454 in 2013. For facility births, use of skilled delivery services among ANC registrants rose from 38% in 2012 to 59% in 2013. Male accompaniment to delivery services also increased from 1,732 in 2012 to 1,998 in 2013. Maternal deaths declined from 7 in 2012 to 3 in 2013 with improved morbidity indicators, such as malaria and anaemia in pregnancy.

Furthermore, informal feedback from communities and health workers indicated that fathers' clubs led to a zeal among men to become more involved in the healthcare for their pregnant spouses. TBA engagement through partnerships, dialogues and incentives also greatly contributed to increased use of maternal health services and referrals to facilities for deliveries. Community dialogues further helped to foster family and community engagement in the health of pregnant women. A key challenge, however, was the shortage of health staff to implement the programme and to absorb higher service demands.

These programme innovations were highlighted in the health sector’s annual report and shared during the regional performance review in March 2014. The sub-district where this work was implemented was awarded second best sub-district in the national by the Ministry of Health (MoH) in 2013. This was in large part due to these innovations. Other districts have also shown great enthusiasm for this work, and are likely to replicate these interventions in their areas as well.

Based on these results, we recommend increased training for midwives and health staff to meet increased service demand in the future. There also needs to be sustained collaborations with TBAs through regular meetings and continued incentive packages. Community dialogues (durbars) are also important to maintain involvement of families and communities in maternal healthcare, and could be extended to include other community development issues too. These future directions, however, will require continued funding for at least the next few years in order to sustain progress achieved.

Conclusions

This programme used both quantitative and qualitative evidence to develop and implement targeted, innovative actions that helped improve maternal health outcomes in the district. Indeed, this work shows that simple, innovative solutions combined together – even those often viewed as ‘crude’ or ‘small-scale’ – can bring about major shifts in behaviour and health outcomes if they are evidence-based and developed in partnership with key stakeholders.

Resources

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Websites:

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Case Study 7: Community-based approaches to improve access to MNCH services in the poor urban setting of Ga East Municipal Area, Greater Accra Region

Background

Ghana's population has substantially increased from nearly 7 million in 1960 to about 25 million in 2012, with the fastest growth rates in urban areas. Indeed, in Ghana, the urban growth rate has been about 4.2% during this period compared to the much lower growth rate of 1.0% in rural areas [Ghana Statistical Service 2013]. Today, over half the population of the country lives in an urban setting.

This is a similar situation to other low-income countries that have experienced rapid population growth, particularly in urban areas. Such urban growth has led to the formation of a number of peri-urban settlements where environmental conditions are deteriorating, basic health and social services are lacking, and organisational structures set up in previous decades are increasingly irrelevant to serve the current needs of the population.

This has led to a 'health crisis' among urban poor populations in many low-income countries, including Ghana, which is often neglected in the on-going focus to improve access to health services in rural areas. Urban populations generally have better health outcomes compared to their rural counterparts since available health services are often concentrated in urban areas [Magadi et al. 2003]. Yet, poor urban groups face difficult and unique health challenges that have not been adequately addressed given the focus by government and development partners on rural poverty issues [GHS 2002; UNU-WIDER 2011].

The 'health crisis' in poor urban areas in low-income countries has been increasingly documented in recent years. Research shows that health systems are unable to accommodate expanding urban populations [Zulu et al 2011]. Indeed, rapidly growing slums and shantytowns on the periphery of cities often have similar or worse social and economic conditions than many underprivileged rural areas in these same countries [Adepoju 1988; UN 1989; Stephens et al 1997; Songsore 2000].

In addition to communicable disease issues found in rural communities, poor urban populations are also exposed to non-communicable health challenges resulting from poverty, overcrowded unsanitary conditions and social isolation. These challenges include hypertension, diabetes, hepatitis and cancers that largely afflict adults. There are also issues of domestic violence, sexual abuse, rapid spread of infections (notably HIV and STDs) and poor referral systems for maternal and child health emergencies [UNFPA 2007]. These additional challenges make it important to focus not only on infant and child health issues, but also problems facing poor urban adults as well.

Given this situation, it has become increasingly important to design approaches to bring services to people in poor urban areas and to help communities feel empowered to improve their own health situations as well. Such community-based approaches could reduce barriers that prevent accessing health services in urban slums, and thus reduce health inequities within urban settings overall.

To this end, the School of Public Health in Ghana developed the Ghana Essential Health Intervention Programme (GEHIP) that was modelled on the Community-based Health Planning and Services (CHPS) initiative developed for rural areas in 1999. This approach mobilises communities, resources and cultural institutions to improve access to essential health services through community-based initiatives. The GEHIP initiative was started in the Ga East Municipal Area of the Greater Accra Region in 2009 and will continue until 2015.

Objectives

The objectives of the Ghana Essential Health Intervention Programme (GEHIP) are:

- To ensure that essential health interventions reach under-served populations in the district
- To improve the efficiency and responsiveness to community issues
- To develop effective inter-sectoral collaborations to serve various population needs
- To accelerate progress towards MDG 4 and 5 targets in these areas

Programme description

The programme began with the establishment of two community-based health and planning services (CHPS) zones in 2009, which were later scaled up over three years to include 15 functional zones in the Ga East Municipal. The CHPS zones were modelled on previous CHPS initiatives in rural settings.

The development of a CHPS zone generally includes a series of steps that includes preliminary planning, community entry, creation of community health compounds, posting of Community Health Officers (CHOs) to these compounds, procurement of logistics and deployment of volunteers.

Throughout these stages, a partnership is developed between community leaders and members in order to come to a general consensus on the local health needs. This consensus-building step, in turn, forges an important feeling of community ownership of any future initiatives. This perception of ownership is the driving force behind past successes of the CHPS initiative. This makes it important for CHOs to continually educate and motivate the community to support their sustained interest in the programme [Nyonator et al 2005].

Based on community inputs, Community Health Officers (CHOs) provided the following:

- Household visits for antenatal and postnatal care
- Family planning services
- Health education and school health services
- Outreach clinics for child welfare services
- Referral of severe diseases or conditions to facilities

CHOs were provided with periodic in-service trainings to improve their basic clinical and midwifery services and to develop diplomacy and counselling techniques to improve communications with community members.

Results and discussion

During this project, 1,186 children less than five years old attended child welfare services either through home visits or at clinics. Routine school-based screening services to detect health issues or developmental challenges was conducted on 2,054 of the 6,799 children aged 5–14 year olds in these communities. The CHOs also conducted health education campaigns in the schools in order to promote hygienic practices, such as proper hand washing.

The urban CHPS communities have 8,768 women in aged 15-49 years and in the last six months, CHOs educated 1,882 of these women on the use of contraception, need for antenatal and postnatal care; exclusive breastfeeding, newborn care, proper weaning practices and hygienic food preparation. A number of men in the same age group have been involved in couple-based counselling on reproductive health services, provision of home-based health education as well as screening for both communicable and non-communicable diseases. To encourage more men to participate in these activities, a Father Support Group was formed in one of the zones. This group is made up of male volunteers in the communities who counsel men and encourage them to support their wives in maternal and child health-related issues. This initiative is currently being replicated in seven other zones in the municipality.

Collaborations with the private sector and researchers Collaborations with private healthcare providers were necessary because the municipality did not have any public health facilities. These private facilities provided accommodation for the community-based child welfare clinics, which in turn increased their client volume and ensured that referrals were made to these clinics. The Ga East Municipal Health Directorate gained skilled CHOs who also underwent a two-week training programme (sponsored by the GEHIP project). The CHOs were also provided with any necessary logistics for service delivery and in-service trainings to help address any challenges in the work.

Based on results of the project, the Ghana Health Service now has evidenced-based information on how to effectively implement urban CHPS as a primary health care strategy for underserved urban communities. The intervention has also created research opportunities for the School of Public Health by creating research and implementation collaborations with the Ghana Health Service.

Extending surveillance systems into communities The CHOs have a detailed data archival system such that every activity that takes place in the field is recorded. Each service rendered is noted in the Home Visit Record book, as well as in health record booklets provided by the Ghana Health Service for antenatal care and child welfare clinics. Data is then compiled on a monthly basis to assess trends in service utilisation and to regularly evaluate the project.

Tailoring CHPS to urban settings was a very challenging process and these modifications included:

- **Home visits** were re-scheduled to fit the working hours of urban populations, and were conducted in the early morning hours with occasional weekend visits.
- **Adolescent health** Adolescent Clubs in schools were established in all zones in order to provide a means for CHOs to interact with the young community members. Activities included discussions about personal hygiene, sex, peer pressure and community clean-up exercises.
- **Community outreach and engagement** To further entrench the CHPS concept in communities, CHOs organised monthly clean-up exercises in various zones. One CHPS zone also initiated community health walks every month. These initiatives enabled CHOs to interact closely with community members and, in the process, give their presence in the community a positive overtone. One challenge, however, has been CHO turn over since they often leave the project to further their studies. This has left the project understaffed with increased re-training needs.

At the outset of the CHPS programme, volunteers were also recruited to serve on community health committees. These volunteers met regularly to give the committee reports on CHPS activities in their zones and to also allow them input into essential decision-making processes. A major challenge, however, was that these were unpaid volunteers and lack of reimbursement reduced their productivity and led to default. In the future, a different approach may be needed such as by starting each zone with two volunteers and then allowing them to identify other individuals within the communities who are motivated to work as volunteers.

- **Community practices and perceptions** are different across settings and need to take into account in developing a new intervention. For example, CHOs initially experienced some resistance from mothers during home immunisation exercises. Culturally, women in Ghana are proud to dress up in their white attire and carry infants to clinic visits. In addition, leaving the home meant they received stipends for transportation and any other expenses that may arise. The CHOs quickly realised that some women did not appreciate home visits to immunise children as this deprived them of the opportunity to dress up and receive stipends. Given this realisation, the CHOs collaborated with local private health facilities to receive space for clinics. This guaranteed a venue for child welfare clinics outside the home without the burden of having to travel long distances to access the service. In exchange, CHOs referred cases to the clinics and followed-up with community members in their homes after discharge. During clinic visits, CHOs took the opportunity to educate mothers on family planning, exclusive breastfeeding, home accident prevention, good hygiene and proper weaning/feeding methods.

Wide dissemination The results of this programme have been shared with the Upper East Region GEHIP team in a one-day seminar held in Accra on March 13, 2013, as well as at the Annual National District Health Directors' Conference in August 2013. There was also a stakeholders' meeting in December 2013 that fostered collaborations between private sector providers and urban CHPS operatives.

Conclusions

In the next fifteen years, 80 percent of the global urban population will be living in towns and cities of low-income countries [UNFPA 2007]. As a result, efforts to improve global health conditions must increasingly focus on the needs of urban populations in low-income countries, particularly in slums and peri-urban areas where most population growth will be absorbed. This current intervention could serve as a model for improving access to health services and reducing health inequities among the urban poor.

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Conclusion

Innovations are a central means to achieving UHC. Too often, the discussion about innovation focuses on how to bring external technologies into a health system instead of working to foster home-grown innovations designed by those who understand the complexities and practical realities of local contexts. This paper describes how numerous researchers, practitioners, and community members have worked collaboratively to overcome bottlenecks that prevent accessing MNCH services. The examples from Ghana show that even with limited resources, it is possible to develop high-impact and practical solutions to a diverse range of problems that ultimately challenge efforts to achieve UHC.

Case Study 1 highlights the vital role that systematic, participatory and district-centred performance monitoring plays in helping managers use evidence to identify access barriers. The use of an open forum to share experiences not only catalyses innovations, such as those presented in this paper, but also helps disseminate lessons learnt and useful practices.

Turning knowledge into practice requires an enabling environment, as well as developing core human resource competences to understand and use data to solve service delivery issues. Case Study 2 exemplifies the need to develop research capacity at local levels to identify and solve everyday problems in health service delivery. Research in Ghana is grounded in the aim of creating locally appropriate solutions to problems, and bringing value-adding strategies to scale. This is demonstrated in Case Studies 3 and 4, showing how the cornerstone of this approach is to involve communities, families and individuals in health promotion activities, which require an iterative process between researchers, health centre staff and the communities they serve. The key to successful health service delivery is to consistently have families and communities discuss their perceptions of services and reasons for underutilization with staff, and for managers and researchers to systematically use this locally unique information to scale up high-impact interventions tailored to different community and household contexts. This echoes a growing awareness about the need to complement studies concerned about the generalizability of findings, with studies that focus instead on criteria for determining if innovative approaches can feasibly and sustainably be brought to scale.¹ Case Study 4 provides powerful evidence that community dialogues are not just a good idea to improve service delivery, but that they are the foundation for pro-equity efforts to increase access to and utilisation of essential health services.

Much has been made about the intractable nature of maternal mortality, and that the only solutions rest solely with scaling up capital-intensive investments in infrastructure. Certainly there is a great need to expand and rehabilitate necessary infrastructure but, as shown in Case Studies 5 and 6, innovative approaches can also increase the acceptability and utilisation of existing services. Moreover, the use of both qualitative and quantitative approaches to assess service utilisation patterns and the root causes for service underutilisation demonstrate how mixed-method approaches are both feasible and necessary tools for district health managers. Indeed, in the context of growing decentralisation, it will be

¹ For example, see "Scalability – not generalizability – of findings is what distinguishes truly valuable health systems research." (2014) Strengthening Health Systems. <http://shsjournal.wordpress.com/2014/08/16/scalability-not-generalizability-of-findings-is-what-distinguishes-truly-valuable-health-systems-research>

the local level health management teams who lead efforts to achieve UHC. To this end, the case studies show that if district staff are provided with comprehensive information on the causes of access barriers, and if they use this information as a basis for community dialogues about reasons for non-use, they can leverage limited district resources to yield significant changes in behaviours.

The final case study highlights ways to engage communities to improve health service utilisation in poor urban slums. Globally, despite growing national incomes and progress towards MDGs, it is well documented that most countries have experienced increasing health inequities. While rural coverage levels have historically lagged behind those of urban dwellers, rapidly expanding urban and peri-urban populations have begun to generate unique and challenging health inequity patterns. Addressing these inequities will require locally tailored solutions suitable for each unique context. This case study shows the success of the School of Public Health (Ghana) in using lessons learnt from previous community-based approaches to foster effective health innovations (GEHIP) capable of addressing the rapidly evolving needs of vulnerable urban populations.

Achieving pro-equity UHC will be particularly challenging in nations characterized by decentralised decision-making process. In these settings, sub-national authorities often lack technical capacity and incentives to overcome access barriers to high-impact and effective health interventions. This constrains efforts by national governments to address the social determinants of health inequities, and hinders progress towards UHC. Countries seeking innovative ways to overcome access barriers may wish to look at replicating some of the approaches described in this paper, which highlight the importance of inclusive local stewardship and ownership of research agendas. We hope this paper stimulates an expanded research and learning agenda on effective approaches to foster local efforts to overcome barriers to equitable UHC.

Annex 1: Case study template

Introduction

- Title or name of programme / intervention / research
- Organisation or institution
- Location
- Date of activity
- Funding for activity
- Implementer

Situation/Background

- Summary of the situation or context
- Need or problem statement and how this was identified

Activity/programme/intervention

- Objective and overview
- Key activities or components and how they were carried out

Outcomes and impact

- What was the result/outcome/impact of the activity?
- How were the results/outcomes/impact measured or recorded?

Lessons learnt

- What is the key learning/good practices?
- What challenges remain?
- What recommendations can you make?

Scale/dissemination

- Have you disseminated this activity/its results to colleagues? How?
- Is this activity transferrable/would it benefit other areas?
- How could the key learning/good practice be shared effectively with others?

Resources

- People involved/consulted
- Website
- Relevant publications

