WHAT INFLUENCES MATERNAL HEALTH PRACTICES IN FOUR COUNTRIES?
INSIGHTS AND LESSONS LEARNED

BY LAURA SMETHURST
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BBC Media Action is the BBC’s development charity. We believe in the power of media and communication to help reduce poverty and support people in understanding their rights. Our aim is to inform, connect and empower people around the world. We work in partnership to provide access to useful, timely, reliable information. We help people make sense of events, engage in dialogue, and take action to improve their lives.

The content of this report is the responsibility of BBC Media Action. Any views expressed in this paper should not be taken to represent those of the BBC itself, or of any donors supporting the work of the charity. This report was prepared with funding from the UK Department for International Development which supports BBC Media Action’s research and policy work.

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Image: A mother and child, Ethiopia

Photo credit: BBC Media Action
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# Acronyms

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<th>Description</th>
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<tr>
<td>AHS</td>
<td>Annual Health Survey, India</td>
</tr>
<tr>
<td>ANM</td>
<td>auxiliary nurse midwife</td>
</tr>
<tr>
<td>APG</td>
<td>activist participatory group</td>
</tr>
<tr>
<td>ASHA</td>
<td>accredited social health activist, India</td>
</tr>
<tr>
<td>AWW</td>
<td>Anganwadi (community healthcare centre) worker, India</td>
</tr>
<tr>
<td>CSBA</td>
<td>community-based skilled birth attendants</td>
</tr>
<tr>
<td>DFID</td>
<td>UK Department for International Development</td>
</tr>
<tr>
<td>DHS</td>
<td>Demographic and Health Survey</td>
</tr>
<tr>
<td>FGD</td>
<td>focus group discussion</td>
</tr>
<tr>
<td>FHW</td>
<td>frontline health worker</td>
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<tr>
<td>HEW</td>
<td>health extension worker, Ethiopia</td>
</tr>
<tr>
<td>IDI</td>
<td>in-depth interview</td>
</tr>
<tr>
<td>IFA</td>
<td>iron and folic acid supplement</td>
</tr>
<tr>
<td>JSY</td>
<td>Janani Suraksha Yojana (safe motherhood scheme), a conditional cash transfer scheme in India</td>
</tr>
<tr>
<td>MP</td>
<td>Madhya Pradesh state, India</td>
</tr>
<tr>
<td>NFHS</td>
<td>National Family Health Service</td>
</tr>
<tr>
<td>NGO</td>
<td>non-governmental organisation</td>
</tr>
<tr>
<td>PHCU</td>
<td>primary healthcare unit</td>
</tr>
<tr>
<td>PMNCH</td>
<td>Partnership for Maternal, Newborn and Child Health</td>
</tr>
<tr>
<td>PPS</td>
<td>probability proportionate to size, a statistical sampling method</td>
</tr>
<tr>
<td>PRA</td>
<td>participatory rural approach</td>
</tr>
<tr>
<td>PSA</td>
<td>public service announcement</td>
</tr>
<tr>
<td>PSU</td>
<td>primary sampling unit</td>
</tr>
<tr>
<td>QHW</td>
<td>qualified health worker</td>
</tr>
<tr>
<td>RMNCH</td>
<td>reproductive, maternal, neonatal and child health</td>
</tr>
<tr>
<td>SBA</td>
<td>skilled birth attendant</td>
</tr>
<tr>
<td>TBA</td>
<td>traditional birth attendant</td>
</tr>
<tr>
<td>TIP</td>
<td>trials of improved practices method</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNFPA</td>
<td>United Nations Population Fund</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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</table>
Executive summary

BBC Media Action produces health programmes in Bangladesh, Ethiopia, India and South Sudan that inform audiences about maternal and newborn health and life-saving interventions during pregnancy, birth and early childhood. Our radio and TV programmes, including family dramas and magazine shows, mobile health projects and other innovative approaches challenge attitudes, improve knowledge and address unsupportive social norms around health. This research report focuses on two important aspects of positive behaviour that improve maternal and newborn health: attending antenatal care services with a qualified provider and preparing adequately for birth.1

BBC Media Action’s approach to broadcast programming and to research in health focuses on influencing drivers of change. Among these drivers are: knowledge, attitudes and beliefs; social norms; confidence, agency and self-efficacy;2 and interpersonal discussion. These, in turn, may influence practices.

The report uses qualitative and quantitative research to respond to the following two research questions:

• What have we learned about current practices around key maternal health behaviours in Bangladesh, Ethiopia, India and South Sudan?
• What have we learned about the potential drivers of and barriers to these health behaviours?

This research report presents formative and baseline data from BBC Media Action’s health projects. In 2012 and 2013, BBC Media Action conducted formative qualitative research in Bangladesh, Ethiopia, Madhya Pradesh and Odisha (formerly known as Orissa) states in India, and South Sudan. It also conducted baseline quantitative research in Ethiopia, Madhya Pradesh and Odisha states in India, and South Sudan. Future research will measure the impact of broadcast programmes on audiences’ behaviours and the drivers of these behaviours, and will compare midline and endline results against these baseline measures. This research report also refers to some challenges and learnings around measurement and fieldwork implementation, which should be considered when interpreting quantitative findings.

Our research so far has drawn on more than 64 focus group discussions, 139 in-depth interviews (IDIs) and survey interviews with more than 9,687 women with an infant 0–9 months. Through it BBC Media Action has learned several important lessons related to communication that now inform the design of our communication programmes. Those about quantitative measurement are also helping the organisation to refine our tools and methods in order to assess the impact of these programmes on audiences effectively.

1. “Antenatal care” is defined as four or more check-ups with a qualified health provider and should include interventions such as checking the mother’s health and the progress of the pregnancy, providing iron and folic acid supplementation, and checking the foetus’ position before birth.

2. “Birth preparedness” or “birth planning” includes: making arrangements for a skilled birth attendant (SBA) to be present at a delivery, preferably in a healthcare facility; arranging transportation; saving money to pay for expenses including transportation and any costs around attending a health facility; planning for possible complications; and assuring a clean hygienic environment for the birth and the newborn. See: The Partnership for Maternal, Newborn and Child Health (PMNCH) (2011).

2. Self-efficacy is the measure of the belief in one’s own ability to complete and reach goals.
Current practices around key maternal health behaviours in Bangladesh, Ethiopia, India and South Sudan

Attendance of appropriate antenatal care services is low. While most women reported receiving some antenatal care in Bangladesh, Ethiopia, India and South Sudan, the majority did not attend the recommended four check-ups and did not attend in the first trimester. Uptake of the recommended antenatal care practices was especially poor in Bangladesh and South Sudan. This research study suggests that women in South Sudan largely receive antenatal care from traditional birth attendants (TBAs), while most women in the other three countries receive their antenatal care from a qualified health worker (QHW).

In all four countries many women could either not afford to stop doing heavy labour, such as agricultural tasks, or to eat a more varied and nutritious diet when pregnant, and/or received limited or no support from relatives to do so. However, some women in Ethiopia were more likely to do so, as were women living in non-traditional family structures in Bangladesh and India.

In Bangladesh, Ethiopia and South Sudan most women deliver at home, assisted by either relatives, neighbours and/or a TBA, and the most commonly made preparations are related to home deliveries. These preparations include preparing clean cloths and a clean blade to cut the umbilical cord. While more families in Bangladesh and India reported making a greater number of the recommended preparations for delivery 3 (such as planning transport to a health facility) than in Ethiopia and South Sudan, preparations are often still inadequate. This can lead to a delay in taking pregnant women to the health facility, including when women delivering at home experience complications during labour. Where preparations are made, they are often linked to the need to prepare the home for the baby and ensure the baby’s comfort, rather than to ensure the safety of the pregnant woman during labour.

This research study suggests that there is considerable scope for programming to improve practices around antenatal care and birth preparedness across the four countries. The findings enable BBC Media Action to identify which segments of its target audiences report especially poor uptake of practices in order to target programming more effectively.

Potential drivers of and barriers to antenatal care and birth preparedness

This research has informed BBC Media Action’s communication programmes and project design by highlighting what appear to be the drivers of, and key barriers to, behaviour change in relation to antenatal care and birth preparedness. Key implications for programming include the need to:

• Address important knowledge gaps around the appropriate timeframes for antenatal care and birth preparedness
• Tackle unsupportive attitudes, especially among the key decision-makers, men and older women
• Consider potential barriers and audiences’ concerns around service provision

There are some key knowledge gaps around antenatal care. Overall, although most people in the target audience know that antenatal care is important, many do not understand the need for different interventions at different stages of pregnancy and the importance of receiving antenatal care early in pregnancy. In Bangladesh and South Sudan, there is an especially poor understanding of the components of antenatal care. Knowledge around antenatal care is generally significantly higher than practice, however, suggesting that other factors are also important in preventing early and regular antenatal care.

Unsupportive attitudes and social norms are also barriers to uptake of appropriate antenatal care in the four countries. This includes the attitude in some communities that pregnancy is a “normal process” and requires no medical intervention, and the norm that women should not disclose their pregnancy outside of their family until the fourth month. In Bangladesh, this may happen even later. As well as addressing key knowledge gaps around antenatal care, programming needs to address unsupportive attitudes around it, particularly among men and older women, who are key decision-makers, especially in Bangladesh and India.

An increase in the uptake of antenatal care in recent years has been associated with the rollout of government services. For example, in Ethiopia this was strongly associated with the rollout of the health extension worker (HEW) scheme. A key driver of attending antenatal care services in all countries is the perceived need to check the baby’s health. The mother’s health is not given priority when allocating household resources and many people do not make the link that the baby’s health, in fact, depends on the mother’s health.

The research suggests that a good understanding of birth preparedness positively influences practice, but knowledge gaps remain. Knowledge around the recommended components of a birth plan is especially low in Ethiopia and South Sudan. Knowledge levels are higher in Bangladesh and India; however, many families do not make the appropriate preparations. This is possibly because many families have a very poor understanding of expected delivery dates or think that preparations for delivery can be made at the last minute. This often means that there are delays in taking the pregnant woman to the health facility for planned facility deliveries or when problems are experienced during a home delivery. Programming should address this poor understanding around the need for advanced planning and could help families find innovative ways to understand women’s expected delivery dates.

Social norms appear to influence the strong preference for home deliveries across Bangladesh, Ethiopia and South Sudan. Even though the vast majority of respondents understand that a facility delivery is safer for the mother and baby, the normative belief that a “normal birth” takes place at home and a home birth is something that women should be proud of prevails across the four countries. Programming needs to address this prevalent belief especially among men and older women.

In promoting improved birth preparedness and facility deliveries, programing should consider financial barriers and the key role that money plays in decision-making around delivery. The findings suggest that women have low levels of self-efficacy to overcome financial barriers to health-seeking behaviours. This is especially true in relation to being able to obtain funds or to negotiate for household resources to be spent on their care. Because women often have a low status within their families and society, there is often a reluctance to spend household resources on their health. Women are much more likely to report the desired practices where family members, especially husbands, have supportive attitudes. As men in many areas consume more broadcast media than women and control household access to it, communication should take their role into account.

The Janani Suraksha Yojana (JSY) scheme in India, a government programme that offers families financial incentives for registering pregnancies and delivering in a health facility, appears to have been successful in increasing institutional delivery. This highlights the extent to which choices around delivery are heavily influenced by financial considerations.4

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4. Janani Suraksha Yojana (JSY) is a government conditional cash transfer scheme (for example payment on uptake of health services) to increase the number of health facility deliveries in India.
It is clear from the research that barriers around health service provision, perceived or otherwise, have a large influence on people’s behaviour. While there is substantial scope to increase health facility deliveries across all countries, programming should be mindful of the accessibility of services. In remote communities, especially in Ethiopia and South Sudan, distance to the health facility and lack of money for or availability of transport are key barriers to institutional deliveries.

Programming needs to reflect these local realities. While such barriers are challenging for a media approach to overcome, programming can explore ways of dealing with financial barriers, for example by encouraging families to use savings schemes. Across the four countries, concerns around being treated poorly by health workers or drugs not being available were cited by many respondents as barriers to attending antenatal care services and giving birth in a health facility. People’s perceptions around service delivery and the acceptability of health services are a key barrier to improved maternal health behaviours. Project teams can consider how programming can improve accountability around health services.

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5. Acceptability captures the extent to which the client is comfortable with the more immutable characteristics of the provider, and vice versa. These characteristics include the age, sex, social class and ethnicity of the provider (and of the client), as well as the client’s diagnosis and type of coverage of the client (Penchansky and Thomas, 1981).
Introduction

Millennium Development Goals four and five call for a reduction in child mortality and improvement in maternal health in developing countries. Most maternal, newborn and child deaths can be prevented with available interventions, such as family planning, antenatal care, preventive treatment of malaria, neonatal tetanus protection, delivery with a skilled birth attendant (SBA), early initiation of breastfeeding and postnatal check-ups for new mothers.  

With funding from the UK Department for International Development (DFID), BBC Media Action runs health projects in Bangladesh, Ethiopia, India and South Sudan. Our programmes inform audiences about maternal and newborn health and life-saving interventions during pregnancy, birth and early childhood. Together with partners, we produce radio and TV programmes, including family dramas and factual shows, that challenge attitudes, improve knowledge and address unsupportive social norms around health. These programmes have an anticipated combined reach of 70 million people over five years.

Extensive needs analysis identified the priority behaviours to be covered across the four countries and informed project design in each country. Research into the communication landscape and the target audiences’ preferences informed BBC Media Action’s efforts to reach them.

BBC Media Action seeks to aggregate data and insights from its health projects in order to contribute to the evidence base on the role of media and communication in achieving health outcomes. The research findings, and where possible the research data, will be accessible to development actors and wider audiences.

Drawing on data and comparing results from four countries, this report seeks to respond to two research questions:

• What has BBC Media Action learned about current practices around key maternal health behaviours in Bangladesh, Ethiopia, India and South Sudan?
• What have we learned about the potential drivers of and barriers to these health behaviours?

It draws on data collected during formative qualitative research in Bangladesh, Ethiopia, India (Madhya Pradesh and Odisha) and South Sudan, and on data from baseline quantitative research for evaluation in Ethiopia, India (Madhya Pradesh and Odisha) and South Sudan.

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7. Baseline quantitative research in Bangladesh was being conducted late 2013 and early 2014, and the data was not available for inclusion in this report.
Chapter 1
BBC Media Action’s approach to health communication

BBC Media Action’s approach to health communication projects and research draws on academic and practitioner literature and guidance, and organisational experience in this field. The organisation focuses on drivers of change in health that are amenable to change through media and communication (see Figure 1). For each of the priority behaviours in the health projects in Bangladesh, Ethiopia, India and South Sudan, researchers prioritised measurement of practices and the following five drivers of change:

- Knowledge
- Attitudes and beliefs
- Social norms
- Self-efficacy, confidence and agency
- Interpersonal discussion

BBC Media Action research seeks to understand these pathways and drivers, to explore potential motivators of and barriers to health practices, as well as to assess programming’s impact on health practices. BBC Media Action conducts research at every stage of project delivery to understand and take advantage of the role of media in development. Formative research, pre-testing, monitoring and evaluation research ensure the organisation’s outputs are responsive to audience needs, rooted in local context and have measurable impact.
As practitioners and researchers in behaviour change have recognised, many factors influence people’s behaviour. These include individual knowledge, attitudes and social norms, as well as individual and societal access to resources, infrastructure, geography and politics. Media and communication can:

- Help to improve health by, for example, increasing knowledge, shifting attitudes and social norms, and increasing people’s confidence and motivation to act in the interests of their own health;
- Enable and increase public and interpersonal discussion, which, in turn, can support the uptake of healthier practices as well as promote greater transparency around health service provision and policy-making;
- Help improve the motivation and performance of health workers.

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Across the four countries, projects share common target audiences. The primary audiences are pregnant women and women of reproductive age, followed by the important secondary audiences of husbands of women of reproductive age and older female influencers. Health workers are also targeted by programming. Further details on individual country contexts and programme designs can be found below.

Bangladesh

BBC Media Action project in Bangladesh

- TV drama *Ujan Ganger Naiya* (Swimming Against the Tide), centred around the lives of rural people of lower socio-economic classes
- A factual radio programme framed around the drama
- Factual TV show* – format to be determined
- Public service announcements on TV,* including on delaying the age of marriage and pregnancy and the importance of early attendance of antenatal care check-ups
- Training for frontline health workers (FHWs)

*All outputs are produced and broadcasted in Bangla

While the maternal mortality rate in Bangladesh has declined steadily in recent years, it is still 194 per 100,000 births, meaning that death in childbirth accounts for 24% of all deaths of women aged 20–34. To help address high rates of maternal and newborn mortality, the Emergency Obstetric Care programme was launched in the 1990s and efforts have been made to improve the health infrastructure, for example there are now 11,500 community clinics at the primary level. The proportion of deliveries attended by a

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skilled attendant increased from 21% in 2007, to 32% in 2011. However, community-based skilled birth attendants (CSBAs) receive only six months’ theoretical and clinical training and CSBAs are not available in many rural locations. The government of Bangladesh 2008 Mid-Term Review found that underlying causes for maternal deaths included “poor access and quality of MNH (maternal and neonatal health) care”. Absenteeism among health workers is a problem in rural areas but even where health services exist, they are often under-used. This may be because a facility is present but the services are not available, or because the quality of services is very poor. Officially, antenatal care is widely available in Bangladesh at minimal cost in government-run facilities.

Ethiopia

Despite making progress in reducing child mortality over recent years, the number of newborn deaths in Ethiopia remains high. Maternal deaths account for 30% of all deaths of women aged 15–49, which, in turn, heavily impacts on the mortality of young babies. This high level of mortality is directly related to the low proportion of women delivering at a health facility.

In 1998 the Ethiopian government introduced a four-tier health system that included a primary healthcare unit (PHCU) comprising one health centre and four satellite health posts. In 2010 there were 1,332 PHCUs serving a rural population of approximately 63 million, and 12,488 health posts – one for every 4,978 of the population. More recently, the government has introduced the health extension worker (HEW) programme. HEWs are community-based health workers who are, theoretically, trained for a year and paid to provide primary healthcare in areas of the country where access is limited. This includes antenatal care as well as information about clean and safe delivery including encouraging families to plan for delivery in a facility. On average, there is one HEW for every 500 households. Officially, antenatal care services are free and

BBC Media Action project in Ethiopia

- Radio magazine programmes Biiftuu Jireenya (Dawn of Life in Afan Oromo) and Jember (Maternal Light in Amharic)
- Public service announcements on radio in Amharic and Afan Oromo
- Listening groups across Amhara and Oromia – groups gather to listen to and discuss the magazine programme

should be available at all health posts and health centres. The Ministry of Health, the United Nations Children’s Fund (UNICEF) and the United Nations Population Fund (UNFPA) have all stated that antenatal care services are widely available in most parts of the country and that the problem is less to do with supply than with demand. However, there is still a low ratio of health professionals tasked with delivering antenatal care to a vast and scattered rural population.

India (Madhya Pradesh and Odisha)

**BBC Media Action project in Madhya Pradesh and Odisha**

A 360 degree communication approach with components of mass media, outreach such as street theatre and community events, and interpersonal communication, including:

- Technical assistance project with a focus on capacity building of state government in behaviour change communication
- Public service announcements on TV
- Long-format radio programming (in Madhya Pradesh (MP) only)
- Listening groups among self-help groups etc. and adolescent girls in hostels gather to listen to and discuss the magazine programme
- M-health intervention *Mobile Kunji* (training of frontline health workers on interpersonal communication and use of tools, including mobile phones)

Madhya Pradesh and Odisha (formerly known as Orissa) are two of the poorest states in India and have some of the worst maternal and child health indicators in the country. Thousands of women die each year in childbirth and maternal mortality rates are higher than the national average. According to the latest Annual Health Survey (AHS) estimates, there are 310 per 100,000 live births for Madhya Pradesh and 277 per 100,000 for Odisha.\(^{12}\) Over the last few years, central and state governments have demonstrated a commitment to improving health outcomes with the introduction of schemes such as the Reproductive and Child Health Programme and *Janani Suraksha Yojana* (JSY) promoting institutional deliveries.

In India there is a complex matrix of national and state government organisations with a stake in reproductive, maternal, neonatal and child health issues. There are three main types of frontline health workers (FHWs) who operate at the community level:

<table>
<thead>
<tr>
<th>Health worker</th>
<th>Role</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accredited social health activists (ASHAs)</td>
<td>Community-based health workers whose role is to create greater awareness of key health issues and to increase the use of existing health services, including antenatal care</td>
<td>One ASHA per 1,000</td>
</tr>
<tr>
<td>Auxiliary nurse midwives (ANMs)</td>
<td>Skilled birth attendants who work closely with ASHAs to motivate pregnant women to attend antenatal check-ups and to take the full course of iron and folic acid supplements (IFAs) and who may also provide basic antenatal care services</td>
<td>One AWW per 1,000 people but far lower in reality</td>
</tr>
<tr>
<td>Anganwadi (community healthcare centre) workers (AWWs)</td>
<td>Community workers who deliver health and nutrition education to families</td>
<td>Madhya Pradesh: 79,000 Odisha: 40,000</td>
</tr>
</tbody>
</table>

South Sudan

South Sudan is the world’s newest country. Its two devastating civil wars ended in 2005 with the Comprehensive Peace Agreement. At independence on 9 July 2011, it was one of the world’s poorest countries with 80% of the population living on less than US$1 a day. More than 60 different languages are spoken around the country. According to UNFPA, “a 15-year-old girl in South Sudan has a greater chance of dying in childbirth than of finishing school”. According to the most recent statistics from the United Nations Development Programme (UNDP), a woman has a one in seven lifetime risk of dying from pregnancy-related causes.

During the Second Sudanese Civil War that ran from 1983 to 2005, 80% of healthcare services in South Sudan were provided by non-governmental organisations (NGOs), which continue to play a big role in healthcare delivery. Health services at the county level are mainly catered for by a government infrastructure of 1,377 primary healthcare units (PHCUs) and 270 primary healthcare centres. Each PHCU is expected to provide basic preventive and curative care and promote healthy behaviours for a catchment population of 15,000. South Sudan has 26 hospitals overall.

There is a large service and quality gap between the essential services the hospitals are supposed to provide and what they actually do provide, and many patients receive only basic care. The main reasons for this service and quality gap are an enormous shortage of qualified staff, insufficient equipment and supplies, and generally poor management. This leaves a current health workforce made up of predominantly poorly trained, low-level professional and auxiliary staff. In reality, most rural women only have access to traditional birth attendants (TBAs), some of whom have received various levels of training from NGOs.
Chapter 3
Methods

This section describes the methods used to collect and analyse data in the formative research in Bangladesh, Ethiopia, India and South Sudan, and the methods used to collect and analyse data for the baseline quantitative research in Ethiopia, India and South Sudan.

Formative research

The formative research studies across Bangladesh, Ethiopia, India and South Sudan were designed to explore drivers of and barriers to common reproductive, maternal and neonatal child health (RMNCH) issues. The designs were driven by specific country contexts and the need to inform media production and so were therefore not standardised across countries. In order to explore a variety of perspectives within our target groups but also gather in-depth data, focus group discussions (FGDs) and in-depth interviews (IDIs) were most commonly used across the four countries alongside other methods. In total, this research report draws on qualitative findings from more than 106 FGDs and 192 IDIs, as well as interviews with healthcare experts, community mappings and trials of improved practices (TIPs). In each country, key target groups for the research were women of reproductive age, as well as husbands and older women who, based on prior knowledge, were identified as key influencers and decision-makers, and health workers. For more detail on the formative research in each country, please see Table 1 in Appendix 1: Study design.

Please note that the findings presented here on the qualitative research are based on a secondary analysis. Primary analysis was conducted in each individual country, mostly using thematic and framework analysis. Interpretation from the secondary analysis has been validated by the researchers directly involved in data collection and individual transcripts were referred to, where appropriate.

Baseline quantitative research

BBC Media Action developed quantitative baseline questionnaires with standardised measures for socio-demographic characteristics, media consumption and health practices that were common to the
four countries, as well as measures of potential drivers of barriers to practices. The research prioritised five drivers of practice in BBC Media Action’s health approach and conceptual model: knowledge, attitudes and beliefs, social norms, self-efficacy and interpersonal discussion. Some non-standardised, country-specific survey items were also developed to measure indicators of interest to the individual country project.

Across the three countries surveyed, the common survey population of interest was women with an infant aged 0–9 months. A total of 9,687 women with an infant aged 0–9 months were surveyed. Specifics of the individual baseline surveys in Ethiopia, India and South Sudan, including details of quality control, can be found in Table 2 in Appendix 1: Study design. Because of programming going on air in Bangladesh in April 2014, the Bangladesh baseline was conducted in late 2013 or early 2014.

Following data collection, retrospective testing was carried out to help refine measurement for the midline. To better understand the baseline data, researchers triangulated their baseline findings with external validated data sources, where available. In South Sudan, as a result of the research infrastructure and post-conflict context, there were no validated external data sources. Researchers therefore relied upon formative research findings and their knowledge of the service delivery environment to better understand findings in South Sudan.

Next phases of data collection

BBC Media Action plans to measure the impact of programming with cross-sectional surveys conducted at midline and endline. Midline and endline data will enable analysis of shifts in outcomes — such as knowledge of healthy behaviours — and differences in outcomes among women exposed to the programming as compared to those not exposed over time. Where possible, we intend to conduct dose-response analysis to explore the differential effects on women who are exposed to different levels of programming. Following this, we plan to analyse the relationship between behavioural outcomes and the potential drivers to better understand the drivers of maternal and newborn health behaviours.

Limitations to the study

When compared to qualitative findings and external data sources, some findings from the baseline research appear surprising and, in some cases, point to challenges around measurement. Overall, the use of self-reporting in both the formative research and the baseline may also have led to social desirability bias and recall bias in reporting. This may have resulted in some of the unexpectedly high practice indicators in

19. External validated data sources are largely only available for practice indicators, with the exception of birth preparedness practice indicators.

20. Given the methodological challenges of conducting quantitative research in South Sudan, it is unlikely that quantitative midline and endline surveys will be conducted in South Sudan.

21. Dose-response analysis examines the effect of changes in doses of exposure on the outcome under investigation.
the quantitative research. It should be noted, however, that self-report is used as the standard for measuring health behaviour across the development sector. Also, while researchers aimed for comparable data across the three countries, the primary aim of samples was to represent the target populations for broadcast interventions. This meant that samples differed in their demographic characteristics. These limitations around measurement and differences in sampling approaches across countries should be taken into account when interpreting and comparing the research findings in Chapter 4: Insights from the research. The key limitations and challenges are summarised below and further details can be found in Appendix 2: Limitations to the study.

- **Differences in sampling approaches for the quantitative research.** As we screened for radio access in Ethiopia, it is likely that people in our sample have a higher socio-economic status than average. In South Sudan, researchers did not screen for media access, but because of security and logistical restrictions, there were limited geographical areas where they were able to conduct fieldwork. All of the baseline locations were therefore within 25km of a town, so almost half of the women surveyed in South Sudan are classified as urban.

- **Measurement of practices around antenatal care.** Some recall errors are expected around recording of timing and the number of antenatal care visits for the last pregnancy. Errors in reporting the timing of antenatal care attendance were potentially exacerbated by the fact that pregnant women often did not know when they became pregnant or their expected delivery date. This is, however, a challenge that is inherent to all survey measurement of this type of indicator. Researchers also found that respondents across all countries – but more so in South Sudan – had difficulties in conceptualising time in the same way as the researchers. While we attempted to address this by using visual aids depicting time during survey interviews, this is still likely to affect the accuracy of the data.

- **Measurement of birth preparedness.** Some of the birth preparedness practice survey items may have lacked sufficient specificity, allowing respondents to interpret questions in a different way than intended. The survey items measuring practices around birth preparedness also used prompted questions which can be more prone to social desirability bias. This may have also led to over-reporting for these birth planning practice indicators.

- **Measurement of barriers to accessing services.** There is a question about the extent to which barriers were perceived differently across the three countries. In the survey tool in India, these survey items also came at the end of a long questionnaire and thus responses may have been biased by respondent burden.

- **Measurement of social norms and self-efficacy.** The results of retrospective validity testing showed that, while some measures

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22. In Ethiopia’s Demographic and Health Survey (DHS), antenatal care indicators are measured within women of reproductive age who had a live birth during the five years preceding the survey. Given that BBC Media Action’s group of primary interest was mothers with an infant aged 0–9 months, researchers might expect less recall bias in the BBC Media Action data than in the DHS, as the women in the former survey were asked to recall events no more than 18 months previously. See Central Statistical Agency and ICF International (2012).

23. Respondent burden refers to the time and resources required for the respondent to answer a survey. The higher the respondent burden, the higher the chance of adverse effects on the data quality.
of social norms and self-efficacy appeared to perform well in some
country-specific contexts, the measures as a whole performed
inconsistently across countries. For these drivers, findings are only
available from the qualitative research. Measures are being refined
in view of these learnings.

• Challenges around quantitative fieldwork implementation in South
  Sudan. Quantitative data from South Sudan should be interpreted
  with caution because of the methodological challenges encountered
  there. Enumerators were required to spontaneously translate
  survey items and response options for some interviews. Although
  translation of survey items was included in enumerator training,
  people spoke a number of different languages which made it difficult
  to monitor if the correct translations were being used. Some of
  the findings on practices around antenatal care and place of delivery
  in South Sudan are also questionable given what is known from the
  formative research and about health service provision. For example,
  the fieldwork researchers observed a tendency for respondents
  to confuse local TBAs with qualified midwives. There may have been
  a similar occurrence with the correct identification of health facilities.
Chapter 4
Insights from the research:
antenatal care and birth preparedness

This section presents some of the findings from the formative qualitative research conducted in Bangladesh, Ethiopia, India (Madhya Pradesh and Odisha states) and South Sudan. It also presents findings from the baseline quantitative research conducted in Ethiopia, Madhya Pradesh and Odisha states in India and South Sudan. Quantitative data from Bangladesh is not included, as it was not available at the time of writing. The quantitative baseline data presented for Ethiopia, Madhya Pradesh and Odisha states in India and South Sudan is for the primary survey population of interest: women with an infant aged 0–9 months.

The first section presents findings related to antenatal care and the second section presents findings related to birth preparedness, firstly summarised across countries and then presented individually by country. Please note the limitations to this study, noted in the previous section, when interpreting and comparing findings. Particular caution should be taken when interpreting quantitative findings around birth preparedness practice indicators for all countries, and quantitative data in South Sudan due to fieldwork and measurement challenges.

We are currently limited as to what extent the findings can draw statistical associations between practice and potential drivers.24 The research can, however, inform BBC Media Action’s communication programmes and project design by highlighting what appear to be the drivers of, and key barriers to, behaviour change in relation to antenatal care and birth preparedness. The findings also enable BBC Media Action to identify segments of its target audiences that report especially poor uptake of practices in order to target programming effectively. Key implications for programming are also presented within this section.

Antenatal care

The qualitative and quantitative research explored a number of desirable practices related to antenatal care. These included:

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24 As a number of attitudinal and social norm measures appear to have performed poorly cross-culturally, they require refinement to ensure that they measure what they are intended to measure within each country context. Researchers would lack confidence in the results if the original baseline measures of attitude and social norms were used in the analysis to explore associations between drivers and practices.
• Going for at least four antenatal care visits with a qualified health worker (QHW)
• Attending antenatal care visits during the first trimester of pregnancy
• Receiving antenatal care from a QHW rather than a TBA

The qualitative research also explored practices around eating a more varied and nutritious diet during pregnancy and reducing workload. While most women reported attending some antenatal care in Bangladesh, Ethiopia, India and South Sudan, the majority did not attend the recommended four check-ups (although a significant proportion in Odisha did), and most waited until their second trimester to attend their first check-up (see Figure 2 below).

Figure 2: Antenatal practices in Ethiopia, India (Madhya Pradesh and Odisha) and South Sudan, according to baseline data

BASES: In first trimester: Ethiopia (2,044), South Sudan (1,638), Odisha (2,751), MP (2,977); four antenatal check-ups with qualified health worker: Ethiopia (2,044), South Sudan (1,638), Odisha (2,760), MP (2,977).

The findings from the quantitative data on South Sudan should be interpreted with caution. Going to a TBA for antenatal care was relatively common in South Sudan and, to a lesser extent, in rural Bangladesh. Eating nutritious food and reducing heavy labour was often not possible across all countries due to financial constraints and lack of support from family members. However, some women in Ethiopia were more likely to do so, as were women living in non-traditional family structures in Bangladesh and India. In India, Ethiopia and South Sudan, research respondents
reported an increase in women attending antenatal care check-ups. This increase seems to have been influenced by the rollout of government schemes such as the Health Extension Worker programme in Ethiopia.

Overall, although most people knew that antenatal care was important, many respondents did not understand the importance of early attendance and the need for different interventions at different stages of the pregnancy. As a result of measurement challenges, it is likely that the quantitative data (see Figure 3 below) overestimates true knowledge around the recommended timing and number of antenatal care check-ups. In Bangladesh and South Sudan many women did not have an accurate understanding of what antenatal care was, and in South Sudan women sometimes lacked knowledge about who was qualified to give antenatal care. There was generally some knowledge of home-based care behaviours such as resting more and eating more nutritious food.

Figure 3: Knowledge around antenatal care in Ethiopia, India (Madhya Pradesh and Odisha) and South Sudan, according to baseline data

<table>
<thead>
<tr>
<th>Country</th>
<th>Baseline Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>52%</td>
</tr>
<tr>
<td>South Sudan</td>
<td>56%</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>74%</td>
</tr>
<tr>
<td>Odisha</td>
<td>31%</td>
</tr>
<tr>
<td>South Sudan</td>
<td>77%</td>
</tr>
</tbody>
</table>

Bases: Know should go in first trimester: Ethiopia (1,899), South Sudan (1,194). Know should have 4+ with QHW: Ethiopia (1,855), MP (2,816), Odisha (2,707), South Sudan (1,293).

*Based include women with an infant 0–9 months who agreed that pregnant women should attend some antenatal care.

While it is important to address knowledge gaps, the fact that knowledge around antenatal care is generally significantly higher than practice suggests that other factors, such as unsupportive attitudes, play a major role in preventing early and regular attendance. The attitude that

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26. Data on attitudes, beliefs, social norms and women’s levels of self-efficacy in relation to attendance of antenatal care services is only available from the qualitative research.
pregnancy is a “normal process” and requires no medical intervention appears to be especially influential on practices in Bangladesh, India and South Sudan. This attitude is most prevalent among husbands and older women, seems to prevent pregnant women from receiving additional support in the home, and can impede regular uptake of antenatal care.

The vast majority of women would not disclose their pregnancy outside of their family until the fourth month, or even the fifth or sixth month in Bangladesh, which could prevent early uptake of antenatal care.

There were also myths about eating and resting too much during pregnancy. There was a belief in all countries that disclosing a pregnancy in the first months brings bad luck. This meant that the vast majority of women would not disclose their pregnancy outside of their family until the fourth month, or even the fifth or sixth month in Bangladesh, which could prevent early uptake of antenatal care. There was some evidence that delays in confirming pregnancy also prevent early uptake.

A key driver of antenatal care attendance in all countries is the perceived need to check the baby’s health. The mother’s health is not given priority when allocating household resources and many people do not make the link that the baby’s health, in fact, depends on the mother’s health.

The qualitative research revealed that, in all countries, social norms could both positively and negatively influence uptake of antenatal care and home-based care behaviours. This was especially true in terms of determining the level of support a woman might receive, how household resources were allocated and who made the decisions around these behaviours. There was some evidence, however, that social norms were changing, in particular in Ethiopia and in some urban areas in India, and as a result some pregnant women were receiving more support. Social norms were more likely to influence practices negatively in families where the pregnant woman had little say in decision-making, that is, where the husband or mother-in-law were key decision-makers.

Across the four countries, findings suggested that many young women had low levels of self-efficacy in carrying out the recommended practices around antenatal care. This is often related to the fact that they generally had no independent source of income and lacked confidence to influence decision-making. In the cases of Bangladesh and India, it was also sometimes related to restrictions on women’s physical movement and a lack of confidence in their ability to know the right thing to do.

In comparison, some women in Ethiopia expressed relatively higher levels of confidence in being able to practise recommended behaviours, especially those who described themselves as educated.
Problems getting to the health facility and concerns around service provision were also reported by many respondents as barriers to attending antenatal care services (see Figure 4). Given their often low levels of autonomy and low status within families and society, women frequently felt some of these barriers were almost impossible to overcome. While there is scope across the four countries to increase early and regular attendance at antenatal care, the local service delivery environments must also be considered. For example, for many women in South Sudan with limited access to health services, the most viable option for antenatal care may be visiting the local TBA to check the baby’s position. The provision of important antenatal care interventions, such as tetanus toxoid injections, is low in some communities.

Figure 4: Reported barriers around getting to the health facility and concerns around service provision in Ethiopia, India (Madhya Pradesh and Odisha) and South Sudan, according to baseline data

BASES: Ethiopia (2,044), South Sudan (1,639), Odisha (3,009), MP (2,977).
Individual findings by country are discussed in further detail below.

**Bangladesh**

All of our findings on antenatal care in Bangladesh are from the formative qualitative research. In both rural and urban Bangladesh, pregnant women generally only attended early and regular antenatal care check-ups if complications had been identified or if the woman felt ill. In rural areas more regular attendance at antenatal care generally stopped as soon as the woman felt better.

Attendance at antenatal care for most women was limited to a visit in the fifth month to check the baby’s position, followed by a visit in the last trimester. In remote rural areas with no access to health centres or where the distance was too far to travel, pregnant women sometimes visited the local TBA to do this, and this is the only type of antenatal care that they received. Our researchers observed that overall knowledge around antenatal care is increasing and some mothers-in-law were increasingly supportive of their daughters-in-law attending antenatal care.

**Implications for programmes on antenatal care**

There is considerable scope for programmes to improve practices around antenatal care across the four countries.

- Programmes should address knowledge gaps around the timing of antenatal care check-ups and should encourage women to confirm their pregnancy as soon as they suspect they are pregnant, then start attending antenatal care services immediately and highlight the benefits of doing so.
- Programmes should aim to reach and engage with key decision-makers, for example husbands and mothers-in-law, among whom unsupportive attitudes around antenatal care are relatively common. Programme content should include their voices and perspectives.
- A key driver of attending antenatal care services in all countries is the perceived need to check the baby’s health. The woman’s health is generally given low priority. Programmes should emphasise that the baby’s health, in fact, depends on the mother’s health, and promote the importance of women’s health.
- Local service delivery environments are an important consideration. For example, for many women in South Sudan antenatal care is only available with a TBA. Programmes must be mindful about recommending services that are not always available.
care services and even accompanied them to check-ups. However, key barriers to early and regular attendance include low knowledge levels, unsupportive attitudes from relatives and low levels of autonomy for pregnant women.

Despite a relatively good understanding of the need for home-based care for pregnant women, most women were unable to do this adequately because they lacked family support or financial resources to, for example, buy nutritious foods. Although most people understood the importance of avoiding strenuous activity and stress, resting more and eating more nutritious food, people in rural areas said that women only need to reduce their workload from the sixth or seventh month of pregnancy, or sometimes even later. Some mothers-in-law reported that doing heavy and everyday work keeps a pregnant woman physically fit, which is necessary for normal delivery.

Despite a relatively good understanding of the need for home-based care for pregnant women, most women were unable to do this adequately because they lacked family support or financial resources.

The cultural norm for a woman to feed herself last at family meals, and thus to have smaller portions, prevails. So does the attitude that pregnancy is a “natural process” and pregnant women do not require special treatment, which was commonly found among older women. In extended families it was the norm for a pregnant woman to continue to do all of her household work, and some women reported being scolded by their mothers-in-law when they tried to follow the doctor’s advice by avoiding heavy work. Even when husbands knew their pregnant wives should reduce their workload and, in theory, supported this, many reported not being able to do so because they simply couldn’t afford to.

Common knowledge gaps around the components of appropriate antenatal care and unsupportive attitudes appear to prevent its uptake. In rural areas, in particular, the importance of attending antenatal care services was mostly linked to the perceived need to check the position of the baby later in the pregnancy. This also reflects the common belief that a foetus is nothing more than a blood clot in the first four months of pregnancy and the rather prevalent attitude in Bangladesh that antenatal care is required to check the baby’s health and growth as opposed to the mother’s health. Urban respondents and women who had previously been pregnant reported a higher understanding of the requirements for antenatal care, but this did not necessarily influence attendance.

There was a minority attitude in Bangladesh that antenatal care is unnecessary for any pregnancy or only necessary for first pregnancies. Some people reported that pregnancy requires minimal medical
intervention unless a woman has complications. In addition, some first-time mothers lacked knowledge around the early signs of pregnancy, which can delay confirmation of pregnancy and attendance at antenatal care.

The custom for women not to disclose their pregnancy outside of their family until the fourth month and the norm in some communities for pregnant women to be confined during their first trimester also appears to impede early attendance at antenatal care. In both rural and urban areas, respondents reported that it brings bad luck to disclose the pregnancy within the first few months. This belief and the fact that women fear miscarrying in the first five months meant that women did not want to discuss their pregnancy with their neighbours and relatives. Therefore, they sometimes missed out on getting advice on pregnancy-related care and antenatal care.

“People don’t discuss pregnancy-related topics freely. People think it has to be very confidential. Many people may think that talking about/discussing female reproductive health is vulgar.”
Public health practitioner, Bangladesh

The fact that it was often the mother-in-law who made decisions around pregnancy within extended families appears to prevent the pregnant woman from receiving the necessary care. Even when the final decision rests with the husband, the mother-in-law’s knowledge and advice often determined the outcome. Based on their own experiences, mothers-in-law were generally unsupportive of regular antenatal care attendance for their daughters-in-law and the traditional family structure often dictated that a young woman must follow her mother-in-law’s advice. Communication on pregnancy-related issues between the mother-in-law and pregnant woman was mostly one-way, with the older woman disseminating information to the pregnant woman, and the younger woman generally lacking the confidence to challenge advice. In some families, husbands also displayed low levels of self-efficacy to make pregnancy-related decisions, possibly due to their lack of knowledge or because they see such issues as a female domain. Generally speaking, Bangladeshi men were often only involved in decisions around antenatal care when expenditure was involved. Some men did not even wish to discuss pregnancy issues with their own mothers out of embarrassment, leaving the mother-in-law as the prime decision-maker and interlocutor with the pregnant woman on these issues.

The low levels of self-efficacy and autonomy of many younger women act as a barrier to them receiving improved care during pregnancy. Even though young women often had higher knowledge levels and more positive attitudes towards antenatal care, most pregnant women lacked the confidence to try to influence the mother-in-law or husband’s
decisions. Women rarely have their own independent source of income, so when husbands or other family members are not willing to spend household resources on the woman’s health, it was observed that the woman generally feels that there is nothing she can do about it.

In some cases, women were unable to attend antenatal care because of restrictions on women’s physical movement, as many young women in Bangladesh were not allowed to leave the house alone (including in urban areas). Some rural women did not even know where the health facility was located as a result of their lack of familiarity with the outside world.

The low levels of self-efficacy and autonomy of many younger women act as a barrier to them receiving improved care during pregnancy.

Some pregnant women also exhibited low levels of belief in their ability to understand advice at antenatal care facilities and therefore sometimes preferred an older woman or their husband to accompany them. However, in some cases they also preferred their relatives to accompany them as they felt that this would help their relatives understand their need for greater support during pregnancy.

Women living in less traditional family structures in Bangladesh, generally in urban areas and without a mother-in-law, were more likely to report going for regular antenatal care check-ups and following the health worker’s advice. It is unclear what role they play in decision-making around their pregnancy-related care, but often they do not have to seek permission to attend antenatal care, for example, which continues to be a barrier to attendance for most rural women.

Respondents’ concerns about the level of care received by pregnant women at antenatal care also seem to impede attendance and community healthcare providers, in particular, were not perceived as being able to provide high-quality health services based on their limited training. In our research, we also found that family welfare assistants themselves (community health workers who work under the Bangladesh Ministry of Health and Welfare providing door-step maternal and child health services) also displayed low levels of knowledge around antenatal care, despite supposedly being trained to provide these services.

Ethiopia

In the quantitative research, only 35% of women in Ethiopia reported attending four or more check-ups for their last pregnancy, and only 15% reporting attending in their first trimester. Twenty per cent of women reported receiving no antenatal care at all for their last pregnancy. Despite most women still not attending early and having regular check-ups, these findings reflect the upward trend for women

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28. The definition of qualified health worker used here for provision of antenatal care in Ethiopia includes health extension workers. The Ethiopian government recommends that, while health extension workers are qualified to provide antenatal care, at least one antenatal care check-up in a pregnancy should be with a nurse, midwife or doctor at a health centre. The figure of 35% may therefore be overestimating the proportion of pregnant women who followed the recommended practice.
attending some antenatal care in recent years in Ethiopia.\textsuperscript{29} This trend was also commonly noted by respondents in our qualitative research, who often attributed this rise to greater exposure to health workers as a result of the health extension worker (HEW) scheme. Many women reported receiving important interventions such as tetanus toxoid injections and iron tablets as part of their antenatal care. Key barriers to early and regular attendance at antenatal care include a delay in women attending the health centre to confirm their pregnancy, lack of support from some husbands for women to attend (financial support in particular) and distance to the health facility.

In the qualitative research, some women reported eating a more nutritious diet and reducing their workload when pregnant, although not necessarily throughout the whole of their pregnancy. Other women were, however, unable to eat a more nutritious diet or reduce workload during pregnancy, often because they lacked the financial resources to buy certain foods or there was no one else willing or available to assist them with work.

Overall, there was a relatively good understanding around the need for regular attendance of antenatal care appointments and a good understanding of the appropriate components of antenatal care such as tetanus toxoid injections, iron tablets and blood tests. However, there appear to be knowledge gaps around the need to attend early. Seventy-four per cent of women reported that pregnant women should have at least four antenatal care check-ups and 52% reported that pregnant women should attend their first antenatal care check-up in the first trimester (see Figure 3).

However, this may be an overestimation of appropriate knowledge,\textsuperscript{30} and when respondents were probed on this in the qualitative research, many were unsure how many times and when women should attend antenatal care. High proportions of women knew that women should have antenatal care for all pregnancies (97%). There was a general understanding among respondents (in the qualitative research) that TBAs are not qualified to provide adequate antenatal care services and women could generally recognise early signs of pregnancy. However, despite recognising these signs they would still sometimes delay going to a health centre to confirm pregnancy by as much as a month.

Overall, individual attitudes around attendance of antenatal care services seem to be relatively supportive. However, the custom for women to conceal their pregnancy outside of the family for the first few months (or until she is “showing”) and lack of support from husbands are a barrier for some women. The belief that disclosing a pregnancy in the first months brings bad luck prevents early attendance of antenatal care services; women may not want to arouse suspicions among others in the community by attending. Some women in the qualitative research

\textsuperscript{29} In Ethiopia most antenatal care practice indicators were higher in the baseline data than in the 2011 Ethiopia DHS. This difference was relatively consistent across indicators. This discrepancy may be attributable to differences between BBC Media Action’s sampling frame and the DHS sampling frame. To serve evaluation purposes, BBC Media Action screened for radio access, which may have resulted in this research sample being slightly less rural and of higher socio-economic status than the DHS sample (see under limitations in Chapter 3: Methods and Appendix 2 for further details).

\textsuperscript{30} There were some challenges around measuring knowledge of antenatal care timings – please see Chapter 3: Methods for further details.
reported the lack of their husbands’ consent as a barrier to attending antenatal care check-ups, largely because the husband refuses to give his pregnant wife funds to get to the health facility for antenatal care. There was also a minority belief that antenatal care is only required for a woman’s first pregnancy or is not necessary, as a minority of women report that they have not had antenatal care for any pregnancies and there were no problems with their pregnancies or births.

Overall, husbands reported being supportive in ensuring that their pregnant wives received antenatal care and in helping them to reduce their workload, although it was observed that many men do not actually give the support required. Some men stated that it is their role to provide pregnant women with more nutritious food, help them rest more and seek medical advice, as well as offer moral support during labour. Some women reported that they had received such support from husbands when pregnant. However, they also stated that other men in the community did not share this mentality and did not support their pregnant wives, and some men reported refusing to help their pregnant wives with their housework as it was “women’s work”.

“Husbands should help their wives in any possible area whenever they demand it. In this regard, I have personally helped my wife with cooking, making coffee, washing her clothes and handling every other household chore from her ninth month [of] pregnancy until [the] second month [after] delivery, which she was expected to perform in a normal way. As a case in point, men in the neighbourhood used to ridicule me as they see me flattening animal dung for cooking purposes.”

**Husband, Konchir, Amhara, Ethiopia**

Overall, women were more likely to be able to practise the recommended behaviours during pregnancy if their husbands were supportive. Many older women also said they would advise their pregnant daughters to attend antenatal care in a hospital and health centre. Alongside the increasing support from some men, this may reflect a shift in norms around pregnancy more generally and, albeit to a limited extent, around gender roles. Some pregnant women reported increasing levels of confidence to negotiate with their husbands and influence decision-making, especially those with some education, who were also more likely to understand the importance of antenatal care. Many couples reported making decisions around pregnancy-related issues jointly. Some women reported making decisions alone, but were supported by their husbands. Some women, however, reported having low levels of autonomy and an inability to influence such decisions, which were sometimes also influenced by her husband’s family.

Despite the fairly popular belief in Ethiopia that pregnancy is a “private matter”, discussion of pregnancy-related matters outside the family
was found to be quite common and may positively influence uptake of antenatal care. More respondents reported discussing antenatal care with their husbands than with anyone else (36% reported discussing ANC with their husbands). In the qualitative research some women reported discussing antenatal care and self-care behaviours with neighbours and that they encouraged each other to go to antenatal care. Following the introduction of the HEW programme in Ethiopia, many women reported discussing antenatal care and pregnancy-related matters with HEWs and that they followed their advice.

HEWs reported, however, that their advice was not always followed. Reasons included not having the financial resources to, for example, buy certain nutritious foods or receiving conflicting advice from family or friends, indicating that social norms are influencing practices to a certain degree. Twenty-six per cent of women did not discuss antenatal care with anyone.

Structural barriers, such as lack of funds to pay for transport and distance to health services, were reported by the majority of respondents (see Figure 4). A relatively low proportion, 11%, reported seeking permission to go as a barrier. However, it was observed in the qualitative research that if a woman’s family is unsupportive of her attending antenatal care services, they might not ban her outright from attending, but may not, for example, give her money for transport. A few women reported being able to save their own money to overcome such barriers.

India

In Madhya Pradesh and Odisha norms seem to be changing around attendance at antenatal care, and women are increasingly attending more regular check-ups. In spite of this, relatively low proportions of women in Madhya Pradesh reported receiving four or more antenatal care check-ups, including at least one tetanus toxoid injection and IFA for 100 days or more. While researchers do have data from the baseline on interventions received (and duration of interventions), according to baseline data 59% of women in Madhya Pradesh reported attending three or more antenatal care check-ups. This figure is significantly higher than the 13% in the AHS 2011, but this discrepancy might be due to relatively low numbers of women in the AHS who reported receiving the appropriate interventions. We have not incorporated this into our baseline indicators.

These findings may be indicative of qualitative findings that many women now register their pregnancy by the fourth or fifth month, but some women then only attend one or two more times to receive iron and folic acid supplements. Key barriers to early and regular attendance of antenatal care services include knowledge gaps around recommended timings of check-ups and lack of support from relatives, especially in Madhya Pradesh.
Despite pregnant women often being advised by friends and family to rest more and eat more, they were generally not given any support from their families to enable them to do this, with the exception of lifting heavy items. This is especially the case in extended families where many mothers-in-law/older women believe that too much rest for a pregnant woman can lead to a fat and unhealthy baby. This also reflects the attitude that pregnancy is a "natural process", and women should therefore continue their household tasks throughout their pregnancy.

Barriers to early attendance at antenatal care include a lack of knowledge around the early signs of pregnancy for first pregnancies and the belief that disclosing a pregnancy in the first months brings bad luck.

The vast majority of women knew that women should have antenatal care for all pregnancies; however, only 31% in Madhya Pradesh and 34% in Odisha knew that women should have at least four check-ups. There was a relatively good understanding of the appropriate components of antenatal care, such as tetanus toxoid injections, iron tablets and blood tests, and some women reported receiving these interventions as part of their antenatal care.

Barriers to early attendance at antenatal care include a lack of knowledge around the early signs of pregnancy for first pregnancies and the belief that disclosing a pregnancy in the first months brings bad luck. This meant that some women do not disclose their pregnancy outside of the family until as late as the fifth or sixth month. In Madhya Pradesh, women sometimes preferred to have the dai (TBA) confirm pregnancy, as the dai is trusted not to disclose the pregnancy to anyone else.

For first-time pregnancies, in particular, the pregnant woman lacks confidence in her own knowledge and often has to depend on her mother-in-law for information. Mothers-in-law were, on the whole, less supportive of early and regular attendance of antenatal care services, and in extended families the mother-in-law's knowledge and advice often determined the outcome of decisions around pregnancy-related care. Older women were instrumental in promoting and propagating particular beliefs, including myths and misconceptions, around pregnancy-related care. Some older women also thought that IFA tablets could lead to miscarriages, stillbirth and physical deformities in the baby, and there was some indication that this prevented some younger women from taking IFA tablets.

"IFA tablets do not suit every woman's body. Sometimes they can impact the health of the child and may lead to miscarriage.”

Mother-in-law, mainland village, Odisha, India

32. It should be noted that until recently the Indian government recommended that pregnant women should attend at least three antenatal check-ups, not four.
There was less perceived need for communication between the pregnant woman and her mother-in-law following the birth of the first child, as the woman was then perceived to be more knowledgeable.

Overall, pregnant women exhibited low levels of self-efficacy in their ability to influence decision-making around pregnancy. This is likely to be due to their lack of autonomy – most women have no means of earning money and require permission to leave the house – but also due to how they perceive themselves and their own abilities. In the qualitative research, it was observed that younger women generally accepted whatever decision was made on their behalf in all aspects of their lives. They did not appear to question the rationality behind any of these decisions and some women reported that men were more sensible, practical and rational than women, as though to justify their lack of influence in decision-making.

“Men know more about everything. They also understand better. We women are very emotional and thus do not take practical decisions. They are also the ones who earn money by working tirelessly and they understand the value of money more.”

Woman of reproductive age, mainland village, Odisha, India

The family size and structure determined the type of support that a husband provided to his pregnant wife, and also whether the pregnant woman stayed at her maternal home, where she had more time to rest. In extended families, pregnant women generally have a lowly status, and even if their knowledge or attitude differed, most women exhibited low levels of confidence in challenging their mothers-in-law. They do not attempt to act against their mothers-in-law’s advice out of fear of defying the social norm.

“If our mothers-in-law say that it is good to continue with daily work during pregnancy then we have to do it. What else can we do? We can’t say no.”

Woman, mainland village, Odisha, India

In the qualitative research many women reported preferring to discuss personal matters, including pregnancy-related matters, with their maternal family, neighbours and peers. These were the people they felt most comfortable with and this set of people could influence uptake of both appropriate and incorrect practices. For example, if a neighbour had had a bad experience with IFA tablets, the pregnant woman was less likely to take them.

The rise of the nuclear family in India seems to positively influence practices, as does greater engagement with frontline health workers. Women living in less traditional family structures, that is, without a mother-in-law, were more likely to report going for regular antenatal care check-ups and following the health worker’s advice. In the qualitative
research there was an increasing trend among the younger generation to engage with frontline health workers (FHWs) and increasing trust in their pregnancy-related advice. However, while such discussion might influence the pregnant woman’s opinions, pregnant women often still had low levels of self-efficacy to be able to follow the advice.

There was evidence in the qualitative research, however, that men are now taking an increasing interest in their wives’ pregnancy-related care, which may be positively influencing uptake of antenatal care. However, even where respondents (husbands and mothers-in-law) were supportive of regular antenatal care attendance, antenatal care was generally understood as important in order to check the baby’s health rather than that of the mother. Custom has generally dictated that men are only involved in decisions around antenatal care when expenditure was involved, and as such, the rollout of the JSY scheme seems to have increased male involvement in these decisions, potentially as a result of the financial incentives component of the scheme. Indeed, more respondents in Madhya Pradesh and Odisha reported discussing antenatal and birth planning with husbands than with anyone else.

South Sudan

Forty-eight per cent of women in South Sudan reported receiving four or more antenatal care check-ups with a QHW (see Figure 2), and 16% of women reported attending in their first trimester. Only 16% of women reported receiving no antenatal care at all for their last pregnancy. While these findings indicate that the majority of women are still not attending early and regular antenatal care, these figures are higher than expected based on qualitative findings and pre-existing knowledge. Qualitative findings and observation suggests that for many women in South Sudan, antenatal care in reality entails little more than visiting the local TBA or traditional healer to have the baby’s position checked. The main barriers to early and regular attendance of antenatal care services with a QHW were the poor provision of appropriate antenatal care, especially in rural areas, as well as husbands not consenting or making the resources available for their pregnant wives to attend.

In the qualitative findings there was a general perception that women should rest more, avoid heavy lifting and eat more nutritious foods when pregnant and that this was considered to be the responsibility of the husband. However, in practice, most women lacked the financial resources or the family support to be able to do this.

Knowledge around the need for early and regular attendance at antenatal care was found to be higher than we had expected, although there still appear to be some clear knowledge gaps. Knowledge levels in the quantitative research may have been overestimated, for example 77% of women reported that a pregnant woman should have at least four

33. No validated external data is currently available for comparison to the antenatal care baseline indicators in South Sudan. However, researchers’ understanding of the local service delivery environment, and our observations during the baseline and formative research, suggest that the baseline findings overestimated the true proportion of women receiving four or more antenatal check-ups from a QHW. Because of the urban bias of the sample, respondents were generally likely to have better access to antenatal care services than the general population. However, this does not fully explain the findings as 40% of rural women reported attending four or more check-ups with a QHW, which is significantly higher than formative research would suggest. Throughout the fieldwork researchers observed a tendency for respondents to confuse local TBAs with qualified midwives. As 70% of respondents in South Sudan reported receiving some antenatal care from a qualified midwife, this tendency is likely to have led to an overestimation in the baseline indicator of the proportion of women attending four or more check-ups with a QHW.

34. This is due to challenges around measuring knowledge of timings of antenatal care check-ups. Please see Chapter 3: Methods for further details.
antenatal care check-ups. The high proportion of women who knew that women should have antenatal care for all pregnancies (90%) also reflects a more general improved understanding around the need for antenatal care. However, there is still a lack of knowledge around what antenatal care should comprise and who is qualified to provide it, which may explain why many respondents classify a check-up with a TBA as “antenatal care”. There was an especially poor understanding among some respondents of the specific implications of using or not using a health service, which may be linked to the lower levels of availability of these services.

Possibly reflective of the social norm that a woman’s main role is to reproduce, discussion around pregnancy seemed to be less taboo in South Sudan than in other countries.

While most respondents in the qualitative research felt it was important for pregnant women to attend some form of antenatal care, some unsupportive attitudes still exist. These seem to be linked to the norm that pregnancy is a natural process requiring no medical intervention, which was commonly reported. Unsupportive attitudes were found to be more common among husbands and older women; however, a small number of younger women also expressed the opinion that antenatal care is unnecessary for any pregnancy. These women were also less likely to report attending any antenatal care services at all. A few women believed that antenatal care is only required for pregnancies with complications.

Other barriers to early and regular attendance at antenatal care included a lack of financial resources, poor access to services and lack of husband’s consent, especially when women felt unable to negotiate with their husbands. Some respondents perceived that antenatal care was expensive and, to some, the cost was out of reach, especially once the cost of transport was taken into account and when health workers expected a token of appreciation. Where women reported the lack of husbands’ consent as a barrier to attending antenatal care services, this was largely because their husbands would not give them funds to attend. Decision-making was often governed by the availability of financial resources. Women often lacked the confidence to be able to negotiate with their husbands, and had low self-efficacy to overcome financial or structural barriers to accessing services in the absence of their husband’s support.

There was some evidence in the qualitative findings that social norms are changing towards support of improved care for pregnant women, and that some women have more confidence to challenge their relatives’ decisions than they did in the past. Qualified health workers reported that attendance at antenatal care checks-ups was increasing and that antenatal care was the most popular and well-attended of all reproductive, maternal, neonatal and child health (RMNCH) services, although pregnant women
often missed appointments. Some urban women also reported that their husbands had supportive attitudes towards helping women reduce their workload, but observation suggests that most men still did not offer support. A number of respondents in urban areas also reported that many traditional practices are becoming seen as “something of the past”.

Possibly reflective of the social norm that a woman’s main role is to reproduce, discussion around pregnancy seemed to be less taboo in South Sudan than in other countries. Women reported that they felt confident to discuss their pregnancies outside of the family. While some older women encouraged pregnant women to use health services, there were also many reports of older women giving younger women more traditional advice on pregnancy care and newborn health. However, younger women often said that they did not agree with this advice, while older women suggested that younger women often didn’t agree with them, suggesting increasing levels of confidence.

Birth preparedness

Recognising that birth preparedness practices depend, to some extent, on whether a birth is going to be at home or in a health facility, the research looked at a range of birth planning practices, some of which were applicable to home deliveries, some of which were applicable to institutional deliveries, and some of which were applicable to both. These included: preparing clean instruments and clean cloths; saving enough money for the birth; making a plan in case of complications; planning transport to the health facility; and/or arranging for an SBA to assist with delivery.

Figure 5: Practices around place of delivery in Ethiopia, India and South Sudan, according to baseline data

Delivered in a health facility

BASES: Ethiopia (2,044), South Sudan (1,639), Odisha (2,751), MP (2,977).
To contextualise the findings, information on where deliveries were taking place is presented first. In Bangladesh, Ethiopia and South Sudan the research suggested that home deliveries were more common, usually assisted by a TBA, neighbour or older female relative. In India research suggested that the majority of women nowadays gave birth in a health facility (see Figure 5 on previous page).  

Across the four countries, pregnant women and their families are generally not making the adequate preparations for birth. In the quantitative data across Bangladesh, Ethiopia and South Sudan birth planning practices appeared, possibly, to be more widespread than suggested by the qualitative research. Due to measurement challenges, quantitative findings appeared to overestimate the true prevalence of birth planning practices. Overall, recommended birth planning practices were more commonly reported for institutional deliveries. Where preparations are made, they are often linked to the need to prepare the home for the baby and ensure the baby’s comfort, rather than to ensure the safety of the pregnant woman during labour. Many women reported that they and their families prepared clean cloths and clean instruments and saved enough money for birth during their last pregnancy. Relatively high proportions of women surveyed in the quantitative research reported that they planned transport and made plans in case of complications.

The research suggests that a good understanding of birth preparedness positively influences practice, and where knowledge around an appropriate practice is lower, such as in Ethiopia and South Sudan, reported practice is also lower. There is, however, a poor understanding around birth planning timeframes and expected delivery dates, reflected by the occurrence of women going into labour “unexpectedly”, which was also commonly reported across the four countries. Even where respondents knew the recommended components of a birth plan, they often did not understand that preparations should be made well in advance and, in some cases, families had a very poor understanding of expected delivery dates. This often meant that delays are experienced in taking the pregnant woman to the health facility for both planned facility deliveries or in the event that problems are experienced during a home delivery.

Although the majority of women across Ethiopia, India and South Sudan were able to name two or more danger signs for a woman in labour (see Figure 6), people’s knowledge around birth planning tended to focus on preparing food and clothing. Knowledge about how to prepare for a hygienic delivery was weaker, especially in Bangladesh and South Sudan. Knowledge about making preparations for a home birth or, in case of complications, for a health facility birth was apparently higher in Bangladesh and India than in Ethiopia and South Sudan.

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35. Please note that quantitative data was not available for Bangladesh at the time of writing, so is therefore not included in the charts. All findings from Bangladesh are based on qualitative research.

36. The fact that the percentage of women in Ethiopia and South Sudan reporting that they performed these behaviours was higher than the percentage of women demonstrating knowledge of these behaviours points towards the quantitative data overestimating the true prevalence of birth planning practices.
**Figure 6: Knowledge levels around birth preparedness in Ethiopia, India and South Sudan, according to baseline data**

- **Know 2 + danger signs for a woman in labour**
  - Ethiopia: 61%, Odisha: 65%, Madhya Pradesh: 48%, South Sudan: 83%

- **Know 3 + key components of a birth plan**
  - Ethiopia: 26%, Odisha: 26%, Madhya Pradesh: 37%, South Sudan: 87%

- **Know that birth planning should start before the last trimester**
  - Ethiopia: 12%, Odisha: 33%, Madhya Pradesh: 41%, South Sudan: 31%

*Bases: Know two or more danger signs: Ethiopia (2,044), South Sudan (1,638), Odisha (3,022), MP (2,977). Know three or more components of birth plan: Ethiopia (2,044), South Sudan (1,638), Odisha (3,022), MP (2,977). Know that birth planning should start before last trimester: Ethiopia (2,032), South Sudan (1,441), Odisha (2,594), MP (2,512).

*Bases include women with an infant 0–9 months who agreed that pregnant women and their families should plan for birth.

**Figure 7: Attitudes around the need for birth planning in Ethiopia, Madhya Pradesh and South Sudan, according to baseline data**

- **Strongly disagree**
  - Ethiopia: 56%, Odisha: 24%, Madhya Pradesh: 25%, South Sudan: 2%

- **Disagree**
  - Ethiopia: 29%, Odisha: 38%, Madhya Pradesh: 26%, South Sudan: 7%

- **Agree**
  - Ethiopia: 10%, Odisha: 28%, Madhya Pradesh: 28%, South Sudan: 16%

- **Strongly agree**
  - Ethiopia: 5%, Odisha: 11%, Madhya Pradesh: 22%, South Sudan: 75%

*BASES: Ethiopia (2,024), South Sudan (1,610), Odisha (2,948), MP (2,818).*

All things fall into place on their own when time for delivery comes.
Even though the vast majority of respondents understand that a facility delivery is safer for the mother and baby, the normative belief that a “normal birth” takes place at home and a home birth is something that women should be proud of prevails across the four countries. Women's desire to adhere to this norm may lead to them failing to inform their family of labour pains or of potential complications during delivery, which can lead to delays in referral to the health facility. This belief that births should take place at home was found to be most commonly reported by men and older respondents, and also tends to heavily influence decision-making around whether household financial resources should be spent on a facility delivery.

Women’s self-efficacy around birth planning was strongly related to family structure and control of finances. Women often had low levels of self-efficacy to be able to overcome financial barriers to health-seeking behaviours, especially in relation to being able to obtain funds or to negotiate for household resources to be spent on their care. Self-efficacy was especially low among women in Bangladesh and India. Women are much more likely to report the desired practices where family members, especially husbands, have supportive attitudes. The success of the JSY scheme in India in increasing institutional delivery highlights the extent to which choices around delivery are often largely financial decisions.

It is clear from the research that barriers around health service provision, perceived or otherwise, have a large influence on people’s behaviour. In remote communities, especially in Ethiopia and South Sudan, distance to the health facility and lack of money for transport or availability of transport are key barriers to institutional deliveries, and are seen by many women as insurmountable. Across all countries, it was observed that women’s dislike of having to travel a long distance while in labour influenced their preference for home deliveries. Across the four countries, concerns around being treated poorly by health workers, or health workers or drugs not being available, were cited by many respondents as barriers to giving birth in a health facility (see Figure 4).
Individual findings by country are discussed in further detail below.

Implications for programmes on birth preparedness

- There is considerable scope for programmes to increase safe deliveries in Bangladesh, Ethiopia and South Sudan, and improve birth planning practices across all four countries.
- Knowledge around the recommended components of a birth plan is especially low in Ethiopia and South Sudan. Programmes in these countries should address this knowledge gap.
- Programmes should consider addressing the poor understanding of birth planning timeframes across all countries; for example, around the need for advanced planning, and could help families find innovative ways to better understand women’s expected delivery dates.
- The belief that a “normal birth” takes place at home is a key barrier to institutional deliveries in all countries. Programming needs to address this.
- Programmes should consider that in some cases families may be disincentivised to adequately prepare for birth, as a lack of planning can ensure that a woman will deliver at home, even if this is not her preference.
- Programmes should consider financial barriers and the key role that money plays in decision-making around delivery. Men are key decision-makers around the place of delivery and control the financial resources required for ensuring a safe delivery or making appropriate preparations. In many areas, men consume more broadcast media than women and control household access to it, so communication should take their role into account, and encourage them to allocate more resources to their wives’ healthcare.
- While there is substantial scope to increase health facility deliveries across all countries, programmes should be mindful of the accessibility of services. Where they are not accessible, as in some areas of South Sudan, it may be appropriate for programmes to have a greater focus on hygienic home delivery.
- People’s perceptions around service delivery and the acceptability of health services are a key barrier to improved maternal health behaviours. Project teams can consider how programmes can improve accountability around health services.
Bangladesh
Although the majority of respondents in Bangladesh understood that it is safer to deliver in a health facility, most women reported delivering their last child at home, usually assisted by a TBA, neighbour or older female relative. Urban women were more likely to deliver in a health facility than rural women, although a good number still delivered at home. In urban areas in Bangladesh some families arranged for an SBA to deliver the baby at home. Key barriers to facility deliveries include the strong preference for home delivery, lack of funds and the poor availability of community-based skilled birth attendants in many areas.

Despite many respondents exhibiting relatively high knowledge levels around the components of a recommended birth plan, this did not always translate into families making adequate preparations for delivery. Reflecting the preference for home deliveries, the most commonly reported preparations involved preparing cloths, thread, a blade and selecting the TBA. With the exception of very remote rural areas, there was a better understanding around the need to save money and plan for transport to a health facility than in Ethiopia and South Sudan, and some respondents reported doing so. In some cases this was done regardless of whether they planned a hospital delivery or not. However, planning often tended to be insufficient to positively influence outcomes, as preparations were often made inadequately or too late, and families were often caught off guard when women went into labour. For example, while families might identify the means of transport they planned to take to the health facility, they often failed to ensure that it would be available when needed.

Poor knowledge levels around expected delivery dates, birth planning timeframes and recognition of danger signs were also found to act as barriers to appropriate birth preparedness. There were reports of women giving birth “unexpectedly”, suggesting a poor understanding of expected delivery dates and meaning that families were sometimes unprepared, especially when they had not started to plan for the delivery until later into the pregnancy. While there was some understanding around danger signs in most communities, it was limited and there seemed to be a delay in referring women exhibiting danger signs in labour to a health centre. If a woman experienced complications during labour at home, families tended to wait until the dai failed to deliver the baby, sometimes after two or three days of labour, to seek medical treatment rather than acting as soon as danger signs were recognised. Most people relied on the mother-in-law and TBA’s knowledge and expertise, despite the fact that TBAs and older women were generally unable to recognise danger signs. In spite of this, older women generally perceived their own knowledge around birth planning to be complete.

Taking older women and the dai’s knowledge and experience as the reference point also impedes the correct preparations being made. This
is because it is generally mothers-in-law who make preparations at home, and with the exception of preparing clean blades, they lacked adequate knowledge around hygienic practices in delivery rooms. Delivery was generally considered to be a female domain by most respondents, indicating the limited role that men play in decision-making. As for antenatal care, most discussion and decision-making is left with older female members of the family such as the pregnant woman’s mother and mother-in-law.

Many respondents expressed the attitude that a health facility delivery was only necessary if a woman had complications during pregnancy and labour. This seems to be partially influenced by perceptions of facility-based care but also by the normative belief that “normal” births take place at home and that only “weak” women need to go to hospital. This norm was often strongly upheld by older generations, making it difficult for younger generations to challenge, and appeared to influence the choice of place of delivery to a greater degree than uptake of regular antenatal care. Findings suggested that this social norm influenced the pregnant woman to endure labour pain for as long as possible and to ensure that families were less likely to make preparations to take a woman to a health facility in case of complications. Many respondents reported that they were born at home without any problems so a pregnant woman’s family will plan for a home delivery because this is the way it has always been done.

“It is not [a] matter of … selecting a delivery place. It is the custom here that [a] family will first try for normal delivery at home if [a] pregnant woman doesn’t have any health complication.”
Union member, rural, Moulvibazar, Bangladesh

“My other two children were born at home normally. I did not have to take any preparation. Now I do not know what will happen with this one but I have faith in Allah.”
Husband, rural, Rajbari, Bangladesh

Negative perceptions around health service provision seem to heavily influence the choice of place of delivery. Many respondents thought that facility deliveries were very expensive, which was also found to be a factor in determining place of delivery in India. Most women in Bangladesh feared that a hospital delivery automatically meant delivering by caesarean section, meaning that they would need to rest for longer afterwards and would not be able to carry out their household duties.

Many rural respondents reported that there was no CSBA (community-based skilled birth attendant) available locally and that doctors were not present in hospital or maternity wards. Some respondents reported that services were often unsatisfactory and doctors could have a bad
attitude towards non-paying patients as they were more interested in private/paying patients. Even when a CSBA was available nearby, people often preferred for the TBA to assist, as they believed that the TBA was more experienced and that CSBAs would refer the woman to a hospital. However, a few women who previously had a bad experience delivering at home had a positive attitude towards facility deliveries and planned for a hospital delivery from early in their pregnancy for consecutive deliveries.

Overall, women expressed low levels of self-efficacy to deviate from the social norm and to influence decisions around delivery, as well as to overcome any structural barriers mentioned, for example lack of money. This reflects the fact that women generally have no independent source of income. Lack of money and distance to the health facility were observed to be major barriers for many respondents. Some respondents reported that, as they were poor and live hand-to-mouth, they had no means of saving money for delivery and must rely on Allah for everything.

“Here, most of the people live hand-to-mouth. So they don’t have [the] option to take any preparation; they are more worried about their livelihood … than making preparation for their wives’ delivery.”

Union member, rural, Pirojpur, Bangladesh

Distance was discussed as a key barrier to getting to the health facility in some of the more remote communities in Bangladesh. It was observed that male health workers examining women was also a major concern for women and husbands, which was factored in to decisions around place of delivery. While this was reported as a barrier to facility deliveries in all countries, it was by far most commonly reported in Bangladesh.

“I would rather die than go to a hospital for delivery. A male doctor will take part in the delivery process. They will look at me and they will touch me.”

Mother, rural, Pirojpur, Bangladesh

The research also suggests frontline health workers focus more on disseminating information on family planning and immunisations than around birth preparedness.

Ethiopia

Almost one in four women in Ethiopia delivered their youngest child in a health facility. The norm is for women to deliver at home assisted by a TBA, neighbour or older female relative. Births assisted by TBAs are still relatively common despite respondents noting that they are not qualified to assist or “modern”. Most women only delivered at the health facility if they experienced complications during pregnancy or when in labour, for example heavy bleeding, problems removing the placenta or prolonged
labour. The qualitative research found that many women in peri-urban areas had planned throughout their pregnancy to deliver at a health facility, which may reflect better access to health services. Key barriers to health facility deliveries include unsupportive social norms and poor access to health services.

Reflecting the strong preference for home deliveries, the most commonly made preparations were linked to preparing the home for the birth and for the newborn, for example preparing food to eat post-birth. As can be seen in Figure 8 on the next page, the vast majority of women reported preparing clean instruments (88%) and clean cloths (96%), and many women also reported saving enough money for birth (66%) and making plans in case of an emergency/complications (54%). Few reported arranging for a skilled birth attendant (9%). Because of measurement challenges, it is likely that these figures overestimate the true prevalence of birth preparedness.

While many families in the qualitative research reported preparing clean cloths and clean instruments, few reported planning transport in advance or saving enough money to travel to the health facility in case of complication with a home delivery. Therefore, families were often caught off guard when women went into labour or there was a delay in taking a woman to the health facility when required. Key barriers to appropriate birth preparedness are low knowledge levels and lack of financial resources.

Poor knowledge levels around appropriate birth preparedness are reflected by the fact that only 26% of women knew three or more key components of a birth plan, and only 12% reported that birth planning should start before the last trimester (see Figure 6). A significant proportion of women (39%) did not know two or more danger signs for a woman in labour (see Figure 6). In the qualitative research, while many husbands reported saving money for delivery, it was not always clear what they were saving money for. Some seemed only to be aware of the need for saving money for more general costs such as buying food or clothes for the baby rather than to pay for transport in the event that a woman needed to be taken to a health facility.

Most husbands did not have an emergency plan in place other than calling for an ambulance if their wife experienced complications during delivery, and even in such cases many would not think to obtain the number for the ambulance in advance. The relatively common occurrence of women going into labour unexpectedly also seems to be linked to a poor understanding of estimated delivery dates.

As Figure 7 shows, most women (97%) reported that planning for birth in advance is always necessary although it is unclear how they define planning, as for most respondents it seems to refer to home-based preparations
only. The belief that planning does not impact outcome was also found among some respondents, and appeared to negatively impact birth planning. A few women reported that they were afraid of dying during childbirth and believed that it was God’s will that decided if they live or die, regardless of any preparations they might make.

**Figure 8: Reported birth planning practices in Ethiopia, according to baseline data**

![Graph showing reported birth planning practices in Ethiopia, according to baseline data.](image)

- **Prepared clean instruments**: 59% (institutional), 97% (non-institutional), 88% (all deliveries)
- **Prepared clean cloths**: 96% (institutional), 97% (non-institutional), 96% (all deliveries)
- **Saved enough money for birth**: 79% (institutional), 62% (non-institutional), 66% (all deliveries)
- **Made plans in case of complications/emergency**: 69% (institutional), 50% (non-institutional), 54% (all deliveries)
- **Planned transport**: 47% (institutional), 25% (non-institutional), 30% (all deliveries)
- **Arranged for a skilled birth attendant to assist with the delivery**: 28% (institutional), 4% (non-institutional), 9% (all deliveries)

BASES: clean instruments (2,044), clean cloths (2,044), money (2,035), plans in case of emergency (2,039), transport (2,044), SBA (2,044).

The research found a strong preference for home deliveries among many respondents and a commonly held perception that a woman is “weak” if she delivers in a health facility, unless she has complications. This norm seemed to be a key barrier to increasing institutional deliveries even though there is a good understanding that facility deliveries are safer. Despite some women reporting a positive attitude towards institutional delivery, some felt it was “custom” to give birth at home, indicating that they were perhaps concerned about breaking with the social norm. The tradition in some areas for the woman to be confined at home for 40 days following delivery and follow certain customs was also a barrier to health facility deliveries.

There was some evidence of changing attitudes and norms, however, and some women and men reported a positive attitude towards and increasing support within communities for health facility deliveries. This was on the basis that they were better for the mother and newborn’s health as they provided a more hygienic environment and were better equipped to deal with complications during delivery.
“Hospital is the safest place. Complications or infections won’t happen at hospitals.”
Father, Amhara, Ethiopia

Some women reported that neighbours and friends shared their experiences of institutional deliveries, and women reported that positive experiences had motivated them to have an institutional delivery themselves. Inversely, however, there was also a finding that some communities did not discuss the delivery as they thought it might frighten the pregnant woman. It was unclear to what extent these practices were prevalent and influenced behaviours.

The findings on decision-making around delivery were mixed; there was some evidence of supportive discussion around place of delivery with husbands, as couples often took decisions jointly. Yet a significant number of women lacked the autonomy to make such decisions and were unable to influence their husband’s decisions, despite their own attitudes or preferences. Forty-eight per cent of women reported discussing birth planning with their husbands. In cases where the wife disagreed with the family’s decision, only women with higher levels of education reported that they were able to go against the wishes of their families and deliver in a health facility. Twenty-eight per cent of respondents did not discuss birth planning with anyone.

Lack of money and distance or lack of transport were reported by many women (59% and 57%, respectively – see Figure 4), as a barrier to getting to the health facility. While many women felt that they were unable to overcome these barriers, some women reported being able to earn their own money to save for delivery. While some men discussed making plans to take their wife to a health facility in case of complications, in some cases they recognised that no transportation was available or it was just too far. In some villages without transport, women in labour were taken to a health facility on a wooden stretcher carried by local men. This option for transport was, however, reported to be less feasible during the night and many women feared giving birth on the way, before reaching the health facility.

Concerns around service provision are also important in deterring women and their families from delivering in a health facility. Sixty-five per cent of women said they were concerned that drugs would not be available, and 57% were concerned that no health worker would be there in their time of need. Forty-nine per cent worried about being treated badly by health workers (see Figure 4). In the qualitative research some women said that they were deterred from delivering in a health facility as they had heard that they often lack the facilities to treat people, so pregnant women were then referred to the hospital where there is a fee for services. Husbands mainly discussed concerns that there would be
long waiting times/queues, that there was a lack of adequate equipment and that doctors discriminated against people from rural areas or forced them to pay to go to private clinics. Some respondents were concerned that pregnant women were not treated with respect by midwives.

“There are lots of people by the mountain who are not civilised. They don’t bring pregnant women to the clinic and the women pass away. We hear lots of sad stories like that from that village. They might pass away because of labour and a lack of assistance from professionals and lack of health centres. There are women who say, ‘I better die here. Don’t take me to the clinic’. But her folks will force her and take her anyway. There are a lot of people who fear going to the clinic as if there is something very bad in there.”

Older female, Gomma, Oromia, Ethiopia

Generally speaking, respondents spoke positively about HEWs and their advisory role, although they are not seen as being sufficiently skilled to deliver babies. The HEWs themselves also reported that they lacked the confidence and equipment to assist with deliveries, despite the fact that, theoretically, they were trained to do so. They were reported to be the most important source of health information, by both men and women. Older women tended to see their role more as giving information rather than providing services.

India

Reflecting the upward trend in external data sources for institutional deliveries in recent years, 77% of women in Madhya Pradesh and 85% in Odisha reported delivering their last child in a health facility. In the qualitative research, the increase in institutional delivery was mostly attributed to the JSY scheme and its monetary incentives, as well as the role of FHWs in improving awareness within communities of the benefits of institutional deliveries. Women were more likely to go for an institutional delivery if they had registered their pregnancy with the ASHA or had had a positive experience delivering in a health facility in a previous pregnancy. A significant proportion of women continue to deliver at home, however, across both states. For home deliveries the woman was most often assisted by either her mother or mother-in-law and the dai, as determined by the mother-in-law. Ongoing barriers to institutional deliveries include unsupportive attitudes from family members.

The proportions of women reporting having made the recommended preparations for birth were relatively high, reflecting the good awareness around the importance of making such practices. The majority of women reported having saved enough money for birth, preparing clean cloths, planning transport and preparing clean instruments (see Figure 9 on the next page). The relatively high proportion of women who reported having arranged for an SBA to assist also reflects formative research

38. In Madhya Pradesh the proportion of women reporting giving birth to their last child in a health facility (77%) was very similar to that reported by women in the 2011 Annual Health Survey, India (AHS; Office of Registrar General, August 2011) (76%).

39. Skilled birth attendants were defined as a doctor, nurse or midwife in Ethiopia and South Sudan, and as a doctor, nurse, midwife or auxiliary nurse midwife in India.
findings and links to families’ desire to take advantage of the JSY scheme. In the qualitative research it was found that better birth preparations were generally made if the woman gave birth in her maternal home, which was a tradition in some areas for first pregnancies.

Figure 9: Reported birth planning practices in India, according to baseline data

BASES: MP: clean instruments (2,947), clean cloths (2,406), money (2,967), plans in case of emergency (2,957), transport (2,977), SBA (2,977). Odisha: clean instruments (3,019), cloths (3,019), money (3,009), plans in case of emergency (2,985), transport (2,995), SBA (3,022).

Key knowledge gaps still exist around birth planning, however, meaning that preparations for birth are often inadequate. For example, only 49% of pregnant women in Madhya Pradesh reported that they knew their delivery date, which also reflects the poor understanding around delivery and birth planning timeframes. Families only generally knew in what season or month...
the child would be born. The poor understanding of appropriate birth planning timeframes also impeded preparations being made effectively.

“...I am in my sixth month right now so I will have my delivery by December or January.”
Pregnant woman, mainland village, Odisha, India

Only 33% of women in Madhya Pradesh and 41% in Odisha knew that planning should start before the last trimester, which mirrors formative research findings in Madhya Pradesh where many people believed that planning for birth only needed to start when the woman went into labour. Therefore, families usually did not make these preparations, nor decide where the woman would deliver, until she started experiencing labour pains, meaning that these preparations were made inadequately.

Attitudes around the importance of birth planning appeared to be less supportive among older respondents. The general belief that planning does not impact outcome was pervasive across all areas studied in the qualitative research, and appeared to negatively impact birth planning, especially as it is generally the mother-in-law who is responsible for making preparations. For home deliveries, most older women believed that no or few preparations were required and that women only needed assistance from a qualified health worker in the case of complications. The attitude that people can start preparing for birth when the need arises was accompanied by an attitude that people should not prepare too much for the birth as any “inappropriate outcome” would result in increased disappointment, and that things were “best left to the almighty”. While attitudes around the need for birth planning were relatively positive, 39% of respondents in Madhya Pradesh and 47% in Odisha still believed that things do, in fact, fall into place when the time for delivery comes (see Figure 7).

Attitudes towards institutional delivery were also found to be mixed and appear to influence practices, although there seems to have been an increase in positive attitudes towards institutional deliveries in recent years. In the qualitative research, young people in particular reported that institutional deliveries were better than home deliveries; attendants were more skilled and blood was available in case of an emergency.

The JSY scheme and the financial incentives involved appeared to be positively influencing male attitudes, as for many men the decision about where to deliver was largely a financial one. In both states, discussion between the pregnant woman and her husband regarding making preparations for birth was high. Women who delivered their first baby in a health facility were more likely to have a positive attitude towards health facility deliveries and plan them for subsequent pregnancies. In Madhya Pradesh, however, some women’s families did not choose
an institutional delivery for later pregnancies, largely because they did not receive the benefits under the JSY scheme that they had been promised, and thus the delivery turned out to be costly.\textsuperscript{40}

While the increasing trend for institutional deliveries suggests that social norms are shifting in terms of choice around delivery place, the belief that a “normal birth” occurs at home is still fairly common among some communities. Some women also reported a preference for home deliveries as they felt more comfortable delivering with a relative or \textit{dai}, whom they knew personally, as opposed to a health worker. Most respondents were still largely supportive of the role of the TBA and her advice, which paralleled that of the mother-in-law, and some families reported that they still chose to take the TBA to the health facility with them.

Social networks also appear to influence practices. Impressing others was a key motivation for preparing for birth, especially for home deliveries. Some women reported that neighbours and friends shared their experiences of institutional deliveries, and women reported that positive experiences had motivated them to have an institutional delivery themselves. Such experiences were also relayed among communities by mothers-in-law in India. Negative experiences of institutional delivery were also discussed within communities, which appeared to significantly influence women’s perceptions around the quality of health services.

“My friend had a very bad experience with her delivery in the hospital. She told me that it was very painful. She told me that home delivery is better as she will be taken better care of.”

\textit{Woman, coastal village, Odisha, India}

Younger women generally expressed low levels of self-efficacy to influence their place of delivery or preparations for birth. Younger women often felt unable to follow FHWs’ advice as it contradicted that of their mothers-in-law and lacked the confidence to be able to negotiate with their mothers-in-law or husbands. Women were, however, given more control over decisions with each subsequent pregnancy, as from her second pregnancy the woman was seen as sufficiently knowledgeable. This reflected that as a woman got older, she generally had more say in family decisions. Women who did not live within a traditional family structure also exercised more decision-making powers around birth planning. Women in Odisha had more autonomy than women in Madhya Pradesh because of living in less traditional family structures and other cultural factors.

Other barriers to birth preparedness and health facility deliveries included financial barriers and concerns around service provision. Community stakeholders considered financial barriers alone to be the main barriers to families making adequate preparations for birth. The JSY scheme, however,
This finding could partially be a result of the urban bias of the baseline sample but is also likely to be a result of some challenges around measurement. Throughout the fieldwork, although the definition of an SBA was read to research respondents, researchers observed a tendency for respondents to confuse local TBAs with qualified midwives. Similarly, the majority of women reporting a health facility delivery reported delivering in a government hospital, though researchers’ knowledge of service provision in South Sudan suggested this was not entirely accurate or representative of reality. Only one of the fieldwork locations was close to a government hospital. This finding suggests that respondents and even enumerators may have confused local health posts, which are not staffed by QHWs, with government hospitals.

Concerns around health worker availability (in particular around availability of female health workers) and availability of drugs were also reported by high proportions of women in both states. In spite of this, respondents reported that FHW activities had been instrumental in informing people about the importance of pregnancy registration, antenatal care and institutional deliveries. Younger women often reported that they trusted their advice, although in practice FHWs restricted their advice to a few limited areas in terms of pregnancy-related care. Older women saw the FHWs as young and inexperienced and believed that they only advised on institutional delivery in order to receive their incentive. They therefore often disregarded their advice.

It is worth noting that more women in India consistently reported more barriers in the quantitive research than women in Ethiopia and South Sudan. This may due to measurement challenges, discussed further in Appendix 2, but may also reflect the low levels of autonomy experienced by many women in India and their low levels of self-efficacy to overcome structural barriers to accessing health services.

South Sudan
Thirty-eight per cent of women in South Sudan reported delivering in a health facility. Urban/peri-urban women were more likely to deliver in a health facility than rural women, although a good number still delivered at home. While no reliable external data on delivery practices is currently available for South Sudan, a much higher proportion of women in the baseline data reported delivering in a health facility than would be expected based on the formative research findings, which suggested that delivering in a health facility was rare. This discrepancy may be due to a number of reasons relating to the baseline data collection. In reality, the vast majority of women in South Sudan continue to deliver at home, sometimes assisted by a TBA. Key barriers to institutional deliveries include poor access to health facilities, a fear of being treated poorly by qualified health workers and, in some cases, a poor understanding around the benefits of institutional deliveries.

Even though relatively high proportions of women reported making the recommended preparations for birth (see Figure 10), it was observed in the qualitative research that very few women make adequate preparations. As can be seen in Figure 10, the majority of women in the
baseline reported that they had prepared clean cloths and instruments, and saved enough money for birth. Significant proportions also reported that they had arranged for a skilled birth attendant and made plans in case of complications. It is likely that these figures are an overestimate resulting from measurement challenges. In the qualitative research, very few women had a birth plan in place that involved, for example, planning transport, with the exception of a few (but not all) women who expected complications. The most commonly reported preparations were preparing cloths and blades, although very few women mentioned that the blades were new or sterilised.

Figure 10: Reported birth planning practices in South Sudan, according to the baseline

<table>
<thead>
<tr>
<th>Prepared clean cloths</th>
<th>Prepared clean instruments</th>
<th>Saved enough money for birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional deliveries</td>
<td>Non-institutional deliveries</td>
<td>All deliveries</td>
</tr>
<tr>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Prepared clean cloths</td>
<td>Prepared clean instruments</td>
<td>Saved enough money for birth</td>
</tr>
<tr>
<td>97%</td>
<td>88%</td>
<td>91%</td>
</tr>
<tr>
<td>93%</td>
<td>89%</td>
<td>90%</td>
</tr>
<tr>
<td>73%</td>
<td>43%</td>
<td>54%</td>
</tr>
</tbody>
</table>

BASES: clean instruments (1,635), clean cloths (1,638), money (1,638), plans in case of emergency (1,683), transport (1,635), SBA (1,644).

The low levels of knowledge around the recommended components of a birth plan and around delivery dates also indicate that most women are not sufficiently prepared for birth. Only 37% of women could name three or more components of a birth plan; the most commonly mentioned were preparing clean blades and cloths, although many respondents are not able to link the need for cleanliness to the child’s health. Almost half of the women knew that it is important to arrange an SBA, but this is possibly not representative of the population because of the urban bias of the sample and due to respondents classifying TBAs as trained midwives. Knowledge around danger signs was relatively high, but knowledge around appropriate birth planning timeframes was low; less than a third of women knew that birth planning should commence before the last trimester. In the qualitative research it was commonly reported that pregnant women went into labour “abruptly” and had therefore had

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42. For example, only 25% of women in South Sudan knew that families should save money for delivery despite 54% reporting having saved enough money for delivery.
not had time to go to the market to buy instruments or clothing. This also indicates poor knowledge around expected delivery dates. The problem of “abrupt delivery” was also reported to be the major reason that women were not able to deliver in a health facility, although researchers observed that in reality most women planned to deliver at home anyway.

In the qualitative research most respondents did not understand that health facility deliveries are safer, and believed that a facility delivery is only required for pregnancy with complications and that a birth should generally take place at home. Even where women did report the contrary, they were still unlikely to give birth in a health facility.

Some older women reported that delivering at home was a sign of fertility and strength and something for a woman to be proud of. Other respondents expressed the attitude that as they were delivered at home without any problems, then this was fine for all babies. Some health workers and female community leaders reported that people believed that there was no need to change practices now as births had been happening for many years at home without medical assistance, especially during the war when families had had no other choice.

“We have people who won’t come to the hospital, they say: ‘for us we were delivered at home what happened, we didn’t get problems,’ you see, so they have their beliefs which are there barring them.”

Health worker, Yambio, Western Equatoria State, South Sudan

Some women who previously had a bad experience delivering at home reported a more positive attitude towards facility deliveries and that they planned for a hospital delivery from early in their pregnancy for consecutive deliveries, although these women were very few. Other women feared delivering in a health facility in case they needed to undergo a caesarean section.

A significant number of respondents expressed an apathetic attitude towards birth planning or believed that there was no need to make any preparations such as save money. Seventy-five per cent of women strongly agreed that “all things fall into place when the time for delivery comes” (see Figure 7). A fatalistic attitude was also observed, and while many women discussed the risks of childbirth, they also expressed apathy toward the notion that they could do anything to help mitigate those risks. This reflects the low levels of self-efficacy of many women to influence husband’s decisions around resource allocation. While husbands do not decide what preparations are made, they generally control the finances that will pay for them. The majority of women reported that they felt unable to overcome external barriers to saving money or arranging for transport in case of an emergency. Some women and TBAs reported that a woman was dependent upon her husband and his attitude towards saving
money to make preparations. It is also the husband who usually decides when a woman with complications can be referred to a health facility.

“The delay at home, this is traditional because so many people have to decide whether this woman has be taken to healthcare or not. You have to consult a lot of people. The women sometimes do not have a voice about [their] health; this causes a delay.”

Director General, Ministry of Health, Yambio, Western Equatoria State, South Sudan

Women who did not live within a traditional family structure also exercised more decision-making powers around birth planning and sometimes exhibited higher levels of self-efficacy to carry out preparations. In some cases, where women were heads of the household, they were able to make money by, for example, small-scale cultivation or collecting firewood. In other cases, where women were very poor and lived alone, they were left to give birth alone and there would be no one to take them to the hospital if required. In terms of selecting the place of delivery, husbands were overwhelmingly the decision-makers. Some women reported that they disputed their husbands’ choices around pregnancy-related practices and sometimes did things without their husband’s knowledge.

There was some indication that birth preparations were mostly made in a bid to conform to social norms by “keeping up appearances” for neighbours and relatives and to assure the comfort of the baby. Possibly reflecting changing social norms, many respondents in South Sudan talked about health practices in “modern times” which differentiated them from those previous to the signing of the Comprehensive Peace Agreement in 2005, although these mostly related to superstitions around newborn care. For example, there were some reports of an increasing trend for women to deliver in health facilities, although these women were still in the minority. However, a few women reported that they were criticised by older generations for choosing to deliver in a health facility. It was unclear to what extent this has an impact on practice.
Chapter 5
Next steps

Key implications for programming from this research include the need to address important knowledge gaps around timeframes for antenatal care and birth preparedness and tackle unsupportive attitudes, especially among the key decision-makers, men and older women. At the same time, it must consider barriers and audience concerns around service provision.

BBC Media Action considers the implications of research findings for programmes in each of the four countries. The communication objectives of individual projects are being reviewed to ensure that programming places sufficient focus on the key barriers to behaviour change. This includes, for example, the knowledge gaps identified around antenatal care and birth planning timeframes, and unsupportive attitudes and norms around health facility deliveries. Recognising the influence of husbands and older women in pregnancy and delivery-related decision-making, project teams are ensuring that programmes effectively engage these key target audiences. For example, they have both male and female presenters for magazine programmes and include interviews with audience members from these key target groups.

Individual project teams are also reassessing assumptions around the target audience’s access to health services, and realigning communication objectives with these new research insights. For example, in South Sudan, in areas where antenatal care with a QHW is not available, or health facility deliveries are inaccessible, public service announcements (PSAs) could be produced in local languages focusing on safe delivery at home. Further research is being conducted to better understand service delivery environments and barriers to or concerns around using services, and how programmes can address these in view of government policies. For example, in Ethiopia qualitative research methods are being used to better understand audience members’ perspectives of health services by conducting exit interviews in health facilities as well as interviews within communities.

The research and evaluation strategy across the BBC Media Action’s health projects is also being refined in view of lessons learned around measurement. Across all countries, we are scoping out the use of external data sources to contextualise impact and triangulate with
self-report data. Other research methods are also being used to help understand the contribution of BBC Media Action programming to behaviour change, in relation to other influences. The use of qualitative methods such as projective techniques and observation may be employed to help address social desirability bias encountered in the findings. Academic partnerships are also being established to guide the redevelopment of measurement of constructs such as social norms and practices around birth preparedness. Where appropriate, cross-cultural standardisation of measurement is being reduced to help ensure that measurement accurately reflects individual country contexts.

Quantitative data collection in a post-conflict setting such as South Sudan presents particular challenges because it is difficult to assure the quality of the data. As a result, careful consideration is being given as to whether conducting further quantitative research provides value for money and is appropriate. In instances when quantitative research does not offer value for money, alternative research will be conducted to measure knowledge levels, attitudes and social norms around health behaviours among key target audiences (for example husbands and older women).


Table 1: Formative research methodology

<table>
<thead>
<tr>
<th></th>
<th>Bangladesh</th>
<th>Ethiopia</th>
<th>India</th>
<th>South Sudan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target groups</strong></td>
<td>Women of reproductive age, husbands, older female influencers, TBAs, FHWs, doctors and other key informants working in RMNCH</td>
<td>Women of reproductive age, husbands, older female influencers, health workers and TBAs</td>
<td>Women of reproductive age, husbands, older female influencers, fathers, community leaders, FHWs, health service providers, teachers and religious leaders</td>
<td>Women of reproductive age, husbands, older female influencers, TBAs, community health workers, hospital or health centre staff, other key informants such as opinion leaders and Ministry of Health staff</td>
</tr>
<tr>
<td><strong>Locations</strong></td>
<td>Nine districts with high neonatal mortality rates (urban and rural areas) and three districts with low neonatal mortality rates (urban and rural areas)</td>
<td>Amhara and Oromia regions (peri-urban and rural areas)</td>
<td>Madhya Pradesh (tribal and non-tribal areas) and Odisha (coastal and non-coastal areas)</td>
<td>Western Bahr el Ghazal, Lakes, Western Equatoria State and Central Equatoria (state capitals and rural areas)</td>
</tr>
<tr>
<td><strong>Fieldwork dates</strong></td>
<td>February to December 2012</td>
<td>March to June 2012</td>
<td>July to September 2012</td>
<td>March to May 2012</td>
</tr>
</tbody>
</table>
Table 1 continues

<table>
<thead>
<tr>
<th>Methods</th>
<th>Bangladesh</th>
<th>Ethiopia</th>
<th>India</th>
<th>South Sudan</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGDs, community assessments, health services mobility mapping</td>
<td>FGDs and IDIs</td>
<td>Participatory rural approach (PRA), activist participatory groups (APG), IDIs, FGDs, diads, triads, immersion and TIPs</td>
<td>FGDs and IDIs</td>
<td></td>
</tr>
</tbody>
</table>

| Sample                          | 30 FGDs, 60 IDIs, 15 expert interviews and four community assessments | 56 IDIs and 15 FGDs (total of 118 respondents) | 14 PRAs, 16 APGs, 22 IDIs, 18 triads, 13 diads, 42 FGDs, 8 TIPs and 16 immersions | 19 FGDs (with a total of 120 respondents) and 23 IDIs |

| Fieldwork challenges             | • As it is a sensitive issue, some respondents were reluctant to discuss female reproductive health. | • Initially, there were some difficulties gaining permission to conduct research in Oromia but these were resolved by local researchers. | • Challenges included recruiting women who were pregnant at the time of the study. | • Poor infrastructure and ongoing security issues meant that the most remote communities were under-represented in the sample. |
|                                 | • In some areas, it was difficult for the BBC Media Action researchers to understand the local dialects and freelance researchers had to be recruited. | • Fieldwork began at the start of the rainy season, which caused some difficulties in accessing more isolated kebeles in Oromia. | • Respondents had difficulty answering questions using projective techniques. Guides were adapted so that questioning was more direct. | • Local translators were hired to conduct research in local languages. Although training was conducted with translators and transcripts checked, it is possible that some of the nuances of the language may not always have been captured. |
|                                 | • Plans for fieldwork were changed frequently because of the volatile political situation in Bangladesh at the time. | • Female respondents were uncomfortable talking about family planning and birth spacing in FGDs. IDIs were thus conducted on these issues. | • Respondents had difficulty answering questions using projective techniques. Guides were adapted so that questioning was more direct. | • Female respondents were uncomfortable talking about family planning and birth spacing in FGDs. IDIs were thus conducted on these issues. |
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43. Participatory rural approach (PRA) is a research methodology in which a local community studies an issue that concerns the population, prioritises problems and evaluates options for solving the problem.

44. Activist participatory groups (APGs) are a form of focus group discussion. The participants are people involved in action in the community and they can provide for the balance between insider and outsider opinion on issues. An APG integrates three basis aspects of work – participation in the process being studied, action (involvement with issues on a day-to-day basis) and experience based on participation and action.

45. Triad interviews are of a qualitative nature consisting of a moderator and three participants.

46. Immersion is a research method whereby the researcher immerses themselves into the setting, living among the participants for months or years. The researcher aims to get an in-depth and longitudinal understanding of the subject.

47. TIPs stands for trials of improved practices and is a formative research technique that allows programme planners to pretest the actual practices that a programme will promote. Families (or health workers, etc.) try out proposed practices and their experiences and opinions are used in designing a programme. Using TIPs gives programme planners an in-depth understanding of families’ preferences and capabilities, as well as the obstacles they face in improving their health and their motivations in trying new behaviours and practices. TIPs focuses on behaviour, what people do, rather than on knowledge, or what people know or believe. (See www.manoffgroup.com/approach_developing.html).
Table 2: Quantitative research methodology

<table>
<thead>
<tr>
<th></th>
<th>Ethiopia</th>
<th>India</th>
<th>South Sudan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target groups</strong></td>
<td>Women with an infant aged 0–9 months who listened to the radio at least once a month(^{51})</td>
<td>Women with an infant aged 0–11 months</td>
<td>Women with an infant aged 0–9 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Currently pregnant women</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Women with an infant aged 0–5 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mothers-in-law(^{52})</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Husbands of currently pregnant women/women with an infant aged 0–11 months</td>
<td></td>
</tr>
<tr>
<td><strong>Locations</strong></td>
<td>Amhara and Oromia (rural and urban)</td>
<td>Madhya Pradesh and Odisha (rural and urban)</td>
<td>Yambio (Western Equatoria state), Torit (Eastern Equatoria state), Rumbek (Lakes state)</td>
</tr>
<tr>
<td><strong>Fieldwork dates</strong></td>
<td>December 2012 to February 2013</td>
<td>October 2012 to January 2013 (Madhya Pradesh), February to May 2013 (Odisha)</td>
<td>October to November 2012 (Yambio), March to April 2013 (Torit), May 2013 (Rumbek)</td>
</tr>
<tr>
<td><strong>Sample size</strong></td>
<td>2,044 respondents</td>
<td>7,114 respondents (including 2,977 women with an infant aged 0–9 months)</td>
<td>1,649 respondents</td>
</tr>
</tbody>
</table>

49. A kebele is the smallest administrative unit of Ethiopia similar to a neighbourhood. Each kebele consists of at least 500 families, or the equivalent of 3,500 to 4,000 persons.

50. Projective techniques are an indirect form of qualitative research developed by psychologists in the early 20th century. They may be used to investigate the “whys” of situations. They are not used to measure, but to uncover feelings, beliefs, attitudes and motivation that many participants find difficult to articulate. They require participants to report on how other people behave, projecting their own feelings, behaviour or motivation on to others. Such feelings or motivations may be embarrassing to threatening for participants to express otherwise (Webb, 1992).

51. In Ethiopia, researchers excluded “media-dark” areas and screened for monthly radio listenership to ensure sufficient women exposed to programming at midline and endline to be able to effectively assess impact.

52. Mothers-in-law were selected based on this criteria: either a mother-in-law of a woman with 0 parity, or a mother-in-law of a woman with children 0–2 years, or a mother-in-law of a woman with children 0–5 years.
Four separate sampling frames were used: Amhara urban, Amhara rural, Oromia urban and Oromia rural.

Kebeles were classified as large, medium or small, depending on their population size according to the 2007 census data.

The target survey population (women with an infant aged 0–9 months who listen to the radio at least once a month) are up a small proportion of the population in Amhara and Oromia. If the target number of respondents for each PSU was the same, it would have been difficult to achieve the target numbers in smaller PSUs.

The average size of a cluster or PSU was approximately 245 households. Larger villages were segmented and smaller villages were combined.

Because of the non-availability of new revised data on census enumerators’ books (CEBs), after selecting the ward (administrative boundary) it was divided on the basis of natural boundary—obstructions that prevent crossing land—because wards are large in size and there were no maps available.

Each cluster comprised one to two counties and covered a radius of 25km from the urban centre.

A payam is an administrative geographic unit in South Sudan, between the county and the boma.

Researchers originally intended to randomly select only a fraction of the payams, but when the field realities became evident, random selection no longer became an option. To visit roughly the same number of payams in each location and meet target numbers, they had to visit every payam that was accessible. Therefore, the payams were not randomly sampled.
Table 2 continues

<table>
<thead>
<tr>
<th>Fieldwork challenges</th>
<th>Ethiopia</th>
<th>India</th>
<th>South Sudan</th>
</tr>
</thead>
<tbody>
<tr>
<td>In some PSU in Amhara, radio listenership was found to be very low and the target sample size in these PSUs could not be achieved.</td>
<td>• Initial difficulties in gaining permission to conduct the survey in Odisha led to a delay of several months in going to field.</td>
<td>• Difficulties in recruiting skilled enumerators, especially in Rumbek, and difficulties in translating survey items.</td>
<td></td>
</tr>
<tr>
<td>Thus, additional samples were done in areas where there was better access to radio within the route taken by the fieldwork team.</td>
<td>• Limited availability of mothers of children aged 0–11 months in the PSUs.</td>
<td>• In the first location, Yambio, enumerators struggled with skip patterns and both enumerators and respondents had difficulties understanding some of the survey items, particularly the social norms questions. Therefore, for fieldwork in Torit and Rumbek, researchers cut out a number of survey items from the tool and used electronic data collection using mobile phones with Open Data Kit.</td>
<td></td>
</tr>
<tr>
<td>In some parts of Amhara respondents spoke Afan Oromo rather than Amharic and enumerators were unable to conduct the interview in this language. A team from Oromia was sent to these kebeles to conduct the fieldwork.</td>
<td>• Challenging to interview mothers and pregnant women because family elders constantly accompanied them, particularly in rural areas.</td>
<td>• Respondents often had difficulties in conceptualising time and differentiating between different types of health workers.</td>
<td></td>
</tr>
<tr>
<td>Sampled kebele were replaced due to ongoing conflict in area.</td>
<td>• Difficulties in recruiting skilled enumerators, especially in Rumbek, and difficulties in translating survey items.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

61 The sampling frame was not stratified by rural and urban, as all areas within the clusters were judged to be in reality peri-urban or rural. Informal geographic information system (GIS) data was obtained from the National Bureau of Statistics to determine the percentage of the physical area of each payam located within 25km of the city centre and population statistics were drawn from the 2010 South Sudan Statistical Yearbook. See: Southern Sudan Centre for Census, Statistics and Evaluation.

62 A boma is the smallest administrative geographic unit in South Sudan.

63 If no suitable woman was found in the household, the enumerators reverted back to the random walk method until a suitable household was found.

64 Deletions included the social norms items.
Appendix 2
Limitations to the study: further details

As discussed in Chapter 3: Methods, there were various challenges to measurement and fieldwork implementation which, in addition to differences in sampling strategies across countries, need to be considered when interpreting and comparing the quantitative findings.

All surveys inherently have some measurement error and cross-cultural surveys are no exception. BBC Media Action’s experience of using standardised measures in conducting cross-country research suggests that in order to aggregate data, particular care must be taken to ensure that enumerators and respondents in each country have the same conceptual definitions in mind when they administer, and respond to, a survey item.

Specific challenges around cross-cultural measurement and fieldwork implementation are detailed below:

Differences in sampling approaches for the quantitative research: Given the low levels of female radio listenership in Ethiopia, we excluded “media-dark” areas and screened for monthly radio listenership to ensure they would be able to effectively assess impact throughout the project. With the low levels of female radio listenership in Ethiopia, it is likely that women who do listen to the radio are of a higher socio-economic status than those women who do not listen to the radio. In addition, using community health workers and village leaders to help identify potentially eligible respondents may have meant more isolated women who do not access services were left out of the sample. By excluding media-dark areas from the survey, this study has probably excluded remote areas with less access to health services. This may mean that the women surveyed in Ethiopia were less representative of women in the general population than in Madhya Pradesh and Odisha, where we did not screen for media access.

In South Sudan, we did not screen for media access, but because of security and logistical restrictions, there were limited geographical areas where we were able to conduct fieldwork. All of the baseline locations were therefore within 25km of a town, so almost half of the women surveyed in South Sudan are classified as urban.
These differences between survey populations should be considered when comparing baseline indicators across the three countries and when comparing with external data sources. In Ethiopia and South Sudan indicators based on baseline data might be expected to be higher than other data sources whose surveyed populations are more representative of the general population, including those in very remote and “media-dark” areas.

**Measurement of practices around antenatal care:** Some recall errors are expected around recording of timing and the number of antenatal care visits for the last pregnancy. Reporting of the timing of antenatal care attendance was potentially exacerbated by the fact that pregnant women often did not know when they became pregnant or their expected delivery date. This is, however, a challenge that is inherent to all survey measurement of this type of indicator. Researchers also found that respondents across all countries – but more so in South Sudan – had difficulties conceptualising time in the same way as the researchers. While the researchers attempted to address this by using visual aids depicting time during survey interviews, this is still likely to affect the accuracy of the data.

**Measurement of birth preparedness:** Several quantitative measures of practices around birth preparedness may have lacked the requisite specificity to ensure valid measurement of intended concepts. For example, survey items measuring saving money and planning transport may have lacked the required specificity to attain a true estimation of the correct practices, as the meaning of these concepts can be interpreted quite subjectively by respondents.

It is worth noting that as no gold standard DHS-type measures exist for practices around birth preparedness, BBC Media Action developed and piloted its own measures. During piloting it was found that the concept of birth planning was understood differently across countries and unprompted questions were eliciting very different responses. In order to address the differences in understanding of “birth planning” and to be able to measure levels of birth preparedness in a standardised way, researchers decided that prompted questions would perform better cross-culturally. However, they did not realise that it would be necessary to break down the individual concepts in the prompted questions and some of these questions still lacked specificity.

In the baseline, wording of survey items also may not have been sufficiently localised in the effort to retain standardisation of survey items across countries. The baseline data presented on attitudes towards birth preparedness may be showing true differences between countries, but could again also be due to differences around the understanding of the concept of birth preparedness between countries.

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66. In the DHS survey, antenatal care indicators are measured within women of reproductive age who had a live birth during the five years preceding the survey. Given that BBC Media Action’s primary group of interest was mothers with an infant aged 0–9 months, researchers might expect less recall bias in the BBC Media Action data than in the DHS, as the women in the former survey were asked to recall events no more than 18 months previously. See Central Statistical Agency & ICF International (2012).
The combined use of prompted response questions and the lack of specificity of individual concepts may have led to higher response rates for these survey items. Arguably, it is necessary to further break down specific behaviours and actions within birth planning practices in order to be able to measure if birth planning practices have been carried out effectively.

**Measurement of barriers to accessing services:** There is a question about the extent to which barriers were perceived differently across the three countries. In the survey tool in India, these survey items also came at the end of a very long questionnaire and thus responses may have been biased by respondent burden. There are also gaps around the extent to which barriers to health services are perceived or real. Qualitative research may be well suited to explore these questions.

**Measurement of social norms and self-efficacy:** Much health research on RMNCH behaviours and practices has been conducted by various institutions, and BBC Media Action used measures already validated by the DHS and other similar surveys wherever possible. However, BBC Media Action is measuring drivers, for example social norms, for which there are often no standard measures available and there is no consensus on how they should be measured. The results of retrospective validity testing showed that while some measures of social norms and self-efficacy appeared to perform well in some country-specific contexts, the measures as a whole performed inconsistently across countries.

While the use of standardised social norms measures may have also led to social norms statements being less relevant to some country contexts, it is also likely that the combination of the statement and agreement scale used in these survey items presented too much of a cognitive burden to the respondent. The injunctive social norm measures used the concept of approval, and it is possible that this was also challenging for respondents as many may have felt that they could not claim to know that others would disapprove of something. This appeared to be especially true in the case of Ethiopia where ceiling effects were observed for many of the social norms measures. While the baseline social norms were developed following a review of the existing literature and consultation with academics, there was no consensus as to how social norms should be measured and there were no pre-existing measures of social norms around the specific practices covered in the baseline. Therefore, the development of standardised measures around social norms to be used across four countries has proved challenging and needs to be reconsidered.

The baseline findings also suggest that the measurement of self-efficacy, in relation to the health behaviour on which BBC Media Action is focusing, may be better suited to qualitative research within this research.
As self-efficacy is a latent construct and as the literature suggests that a person’s self-efficacy to be able to do something is particular to a specific behaviour, numerous survey items would be required to quantitatively measure a respondent’s level of self-efficacy to carry out that specific behaviour. It is worth noting that practices often comprise several behaviours and in a bid to keep questionnaire length manageable and to minimise the burden on respondents, it is not feasible to include numerous self-efficacy statements. Similarly, to effectively explore a respondent’s self-efficacy, it is necessary to explore her belief in her ability to overcome potential obstacles. Arguably, qualitative or mixed methods research is better suited to this as it enables researchers to elicit these potential obstacles from respondents and then explore to what extent a respondent feels that they can overcome this obstacle.

There is also some question as to what extent some of the baseline findings on attitudes are comparable across countries. For other priority issues, researchers found ceiling effects in the data for attitudinal survey items, which suggests either significant measurement error or perhaps that attitudinal statements were not relevant to specific country contexts. This latter issue may argue the case that standardisation of measures around attitudes is not always appropriate; while some attitudes appear to be common across countries, others are not. As a result, there is some uncertainty as to what extent some attitudes are prevalent among communities and limited indication of whether these are in fact either enablers of or barriers to practices.

Challenges around quantitative fieldwork implementation in South Sudan: Quantitative data from South Sudan should be interpreted with caution due to the methodological challenges encountered there. Enumerators were required to spontaneously translate survey items and response options for many interviews, and despite translation of survey items being included in enumerator training, it was difficult to monitor if the correct translations were being used. Some of the findings on practices around antenatal care and place of delivery in South Sudan are also questionable given what is known from the formative research and about health service provision. In South Sudan, the fieldwork researchers observed a tendency for respondents to confuse local TBAs with qualified midwives. In some cases it would have been difficult for researchers to quality assure the validity of respondents’ answers, since respondents may not have been familiar with the training their healthcare provider had received, so could not accurately comment on whether or not they received care from a “qualified” service provider. There may have been a similar occurrence with the correct identification of health facilities. The researchers in South Sudan in particular perceived social desirability to be problematic during both formative and baseline research.