

GHANA BEHAVIOR CHANGE SUPPORT PROJECT

2010 Baseline Survey



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GHANA BEHAVIOR CHANGE SUPPORT PROJECT (BCS)

2010 BASELINE SURVEY

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Key Results

The Ghana Behavior Change Support Project (BCS) supports the achievement of USAID's SO7: Health Status Improved. This includes work in the areas of family planning; maternal and child health; malaria; and water, hygiene and infectious diseases. The Center for Communication Programs at the Johns Hopkins Bloomberg School of Public Health (JHU•CCP), along with partners PLAN and CARE, are implementing behavior change communication and community mobilization activities in three focus regions in Ghana: Greater Accra, Western, and Central.

JHU•CCP is conducting program related research using a panel design to ascertain baseline levels of behaviors as well as behavior change predictors and exposures and to assess how both behavior and these predictors/exposures change during the life of the BCS project. An Endpoint Survey will be conducted in the latter half of 2012.

The principal objectives of this longitudinal study are to: (1) provide measures of behavior, knowledge, attitudes, and exposure to messages and activities in relation to our topic areas; and (2) as much as possible, attribute changes in behavior, knowledge and attitudes to exposure to BCS social and behavior communication change activities.

A total of 1945 households were included in the baseline study. A randomly selected household was considered eligible for inclusion into the study if there was at least one male 15-59 or female 15-49 in the household who was not planning on moving in the next three years. Study participants included household heads, men 15-59 years and women 15-49 years in selected households.

Three data collection instruments were used for this study: a household questionnaire, a women's questionnaire, and a men's questionnaire. The questionnaires included modules on socioeconomic status and personal characteristics; water, sanitation and hygiene; malaria; family planning; maternal, neonatal and child health; work, finances and decision making; and media exposure. Data exploration and analysis were conducted using Stata 11.0

Analysis of the baseline data yielded multiple key results, which follow:

Family planning: Among people married or living together, 37.5% of men and 32.9% of women reported using any method of contraception, while 26.7% of men and 21.9% of women reported use of any modern method with their partner. The rhythm method was most frequently used (25.5%) followed by injectables (23.3%). Among the same population, 66.0% of men and 61.0% of women reported intent to use a contraceptive method in the future. Most intended to use injectables (24.8% and 31.8% of men and women respectively), however 22.4% said they were unsure of which method to use in the future.

Maternal health: Among women who gave birth during the last five years, 87.1% reported attending four or more ANC visits during the pregnancy of their youngest child. Among the

same group of women, 58.4% said they delivered their last child in a government health facility, while 28.1% said they delivered at their home. The most common reasons for not delivering in a health facility were that it was too far or they had no transport (26.3%) and that it was not necessary (21.0%). Severe vaginal bleeding was the most commonly recognized danger sign indicating need for attention at a health facility during pregnancy and delivery, as well as during the postpartum period (54.5% and 53.5% respectively).

Infant and child health: The most commonly recognized danger signs among newborns within 48 hours of birth were not crying (29.2%) and difficulty breathing (21.4%). Cited by 51.3%, fever was the most commonly recognized danger sign requiring immediate care at a health facility for children under five. Only 39.0% of children 6-23 months met the standards for all three infant and young child feeding practices.

Malaria: Among all households, 59.6% owned at least one long lasting insecticidal net (LLIN). Households owned a total of 1945 nets, of which 47.2% reported as not used the previous night. Among children under five, 30.2% of boys and 25.8% of girls had slept under an LLIN the previous night. The most commonly cited reason for children not sleeping under nets is that they were too hot (32.2%). Among pregnant women, 22.1% slept under an LLIN the previous night. Only 20.6% of women who had given birth in the last five years reported taking the recommended two or more doses of SP/F to prevent malaria during their last pregnancy. However, 52.6% of women did not remember which prophylactic drug they had taken. Most people said mosquito bites cause malaria (92.5%), however eating dirty food and drinking dirty water were also identified as causes by 17.9% and 14.1% respectively.

Water, sanitation and hygiene: Ninety-one percent of households reported storing their drinking water for more than one day, and among these 65.0% store their water in a container with a lid. Among the latter group, 61.9% reported that they have a lid that screws on or attaches tightly to the container. However, only 5.8% of these households said that these containers have a spigot, small mouth, or tap from which to pour water, meaning people often put their hands and cups, pails, bowls or other containers into their drinking water container, which can contaminate it. In the past day, 63.8% reported washing their hands with soap after coming from the toilet, while 31.0% reported washing their hands with soap before eating.

Gender norms: People agreed overall that women should be educated and play a role in making decisions. However, when it came to statements regarding specific roles of men and women, participants were more split on their attitudes. For example, 98.2% of women and 94.8% of men agreed that women should play a role in making decisions about the household. However, 42.7% of women and 47.4% of men agreed that a man should have the final word about decisions in his home, while 57.0% of women and 52.5% of men disagreed.

1.0 Survey Background

Several trends emerged from the 2008 GDHS and Ghana Maternal Health Survey (GMHS) 2007, both released in 2009. Several indicators have substantially improved (exclusive breastfeeding, ITN use); others have remained largely stagnant (e.g. infant and under five mortality, anemia); and, some have unfortunately worsened (contraceptive use, maternal mortality). The BCS Team will work with the Ghana Health Service to maximize the contribution of BCC towards building on the successes, reversing the negative trends and creating momentum to move the stagnant indicators in a positive direction. We will do this by creating and strengthening social norms around health decision making and behavior.

Family planning/ reproductive health. Modern contraceptive use dropped from 19% to 17% between 2003 and 2008. During this same period, the total fertility rate dropped from 4.4 to 4.0 per woman (GDHS, 2009). An increase in the abortion rate is a possible explanation.

Maternal mortality. The overall MMR of 580 deaths per 100,000 live births is substantially higher than previous estimates. The major causes of maternal deaths cited by the study are: 24% hemorrhage, 11% abortion, and 9% hypertension, 7% sepsis, with over 40% unspecified as “other” (GMHS, 2009).

Infant and under five mortality. The infant mortality rate has largely stagnated since 1993 (GDHS, 2009), only achieving marginal if any reductions during this period. More than half of the deaths in Ghana each year are among children under five, with neonatal mortality increasing as a proportion of childhood deaths.

Malaria. About 33% of households had an ITN (a huge increase from 2003 when only 3% had one) and 28% of children and 20% of pregnant women slept under an ITN. Just over 40% of pregnant women received IPT during antenatal visit to prevent malaria during pregnancy (GDHS, 2009).

Water/hygiene. Over 95% of mothers did not wash their hands with soap after defecating or cleaning a child. Only a small proportion of people have access to improved sanitation facilities.

The Ghana Behavior Change Support Project (BCS) will support the achievement of USAID’s SO7: Health Status Improved including work in the areas of family planning; maternal and child health; malaria; water, hygiene and infectious diseases. The Center for Communication Programs at the Johns Hopkins Bloomberg School of Public Health (JHU•CCP), along with partners PLAN and CARE, are implementing behavior change communication and community mobilization activities in three focus regions in Ghana: Greater Accra, Western, and Central.

JHU•CCP used a panel design to ascertain baseline levels of behaviors as well as behavior change predictors/exposures and will assess how both behavior and these

predictors/exposures change during the life of the BCS project. An Endpoint Survey will be conducted in the latter half of 2012.

1.1 Background on the Ghana BCS Project

The Health Situation in Ghana

The 2008 Ghana Demographic Health Survey (GDHS) continues to reveal tremendous progress in the health status of Ghanaians, including high ANC attendance, increased ITN use, and improved practice of exclusive breastfeeding.

On the other hand, the overall health status of Ghanaians is poor and an on-going area of concern. Several trends emerged from the 2008 GDHS and Ghana Maternal Health Survey (GMHS) 2007, which disclosed stagnation among many indicators including, infant and under-five mortality and anemia. Although Ghana is often seen as a model in Africa, a number of indicators, such as contraceptive use and maternal mortality, have worsened leaving Ghana vulnerable to major health risks.

Ghana Behavior Change Support Project

The Ghana Behavior Change Support Project is a cooperative agreement awarded to Johns Hopkins Bloomberg School of Public Health Center for Communication Programs (CCP) by USAID in partnership with CARE, PLAN International, the Ministry of Health, and the Ghana Health Service (GHS).

BCS is a unique initiative of USAID, representing a substantial investment in a wholly behavior change program; concentrating efforts in regions to maximize impact; coupling the initiative with high quality services project to ensure both supply and demand; and placing substantial investment at the community and family level, where behaviors and norms are formed.

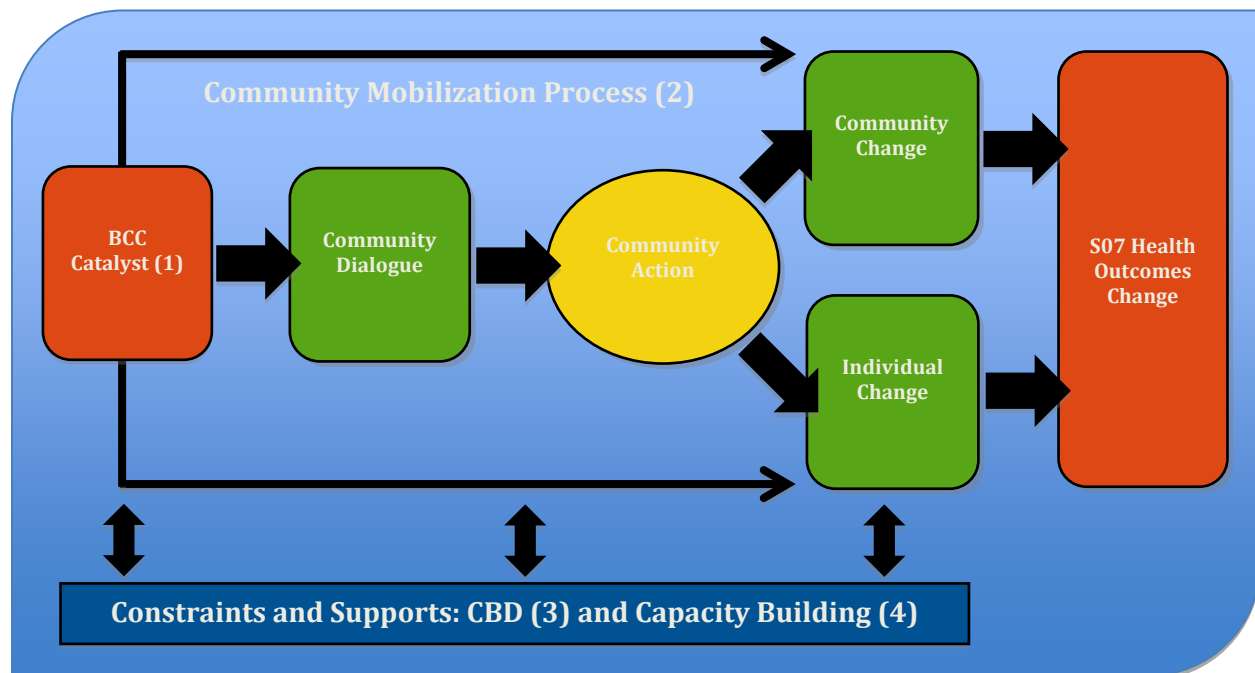
The overall purpose of the project is to assist the GHS at the national, regional and district levels to support its efforts to achieve health related millennium development goals through sustained and coherent social and behavior change communication (BCC) interventions. BCS aims to increase demand for and usage of commodities and services and create positive behaviors in the areas of:

- Maternal, neonatal and child health
- Family planning and reproductive health
- Nutrition
- Water, sanitation, and hygiene
- Malaria prevention and treatment

Conceptual Framework

In Ghana, many individual behaviors are strongly influenced by the social context of households and communities. Health behaviors are more likely to change if interventions involve and are

reinforced by social groups, households and neighborhoods rather than just individuals. The BCS Project employs the Communication for Social Change Model, blending community, interpersonal, and mass media approaches to integrate the four program elements: 1.) Behavior change communication, 2.) Community mobilization (CM), 3.) Community-based distribution (CBD), and 4.) Capacity-building (CB).



BCS will engage Ghanaians through a broad *GoodLife* platform, tying together all the **Behavior Change Communication** interventions to address multiple, integrated health topics. Through the use of innovative, entertaining and educational mass media including a televised game show and a reality-based radio magazine that highlights community initiatives; cell phone partnerships and strategies; community outreach toolkits and health cards; and a wide variety of traditional media, the Ghanaian community will be encouraged to examine their *GoodLife* in relationship to “good health”.

With the aim of creating a social movement, BCS has developed a powerful **Community Mobilization** methodology, *Community Dialogue and Action*, which will not only ensure participation of a broad coalition of mobilizers, but will result in measurable changes in health indicators that can be celebrated annually by model communities.

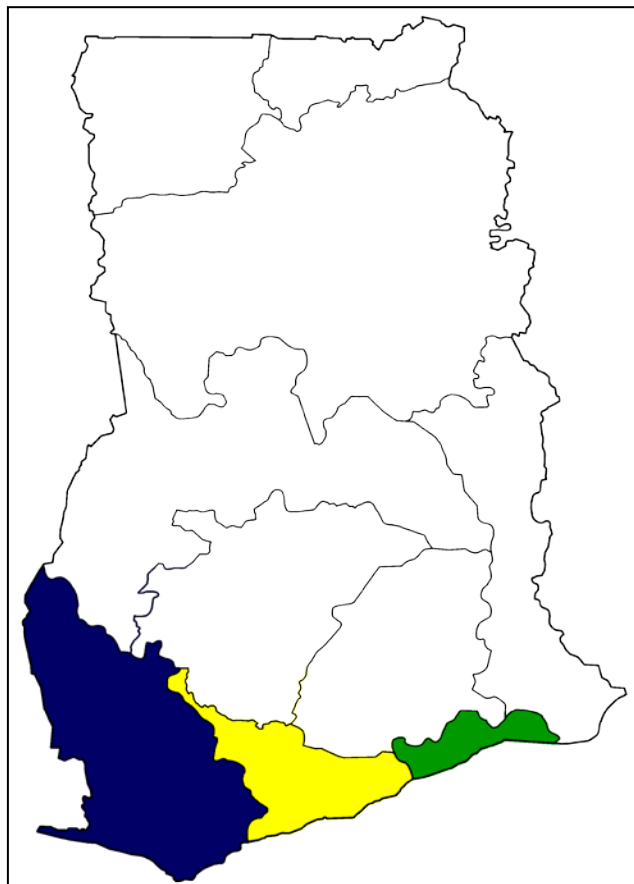
BCS’s **Community-based Distribution** programming will rely on performance based grants, including bolstering the ongoing work of our core partners CARE and PLAN International, competitively selecting additional proven CBD NGOs and developing new partnerships with private sector actors.

Working closely with regional, district, and sub-district health teams, BCS's **Capacity Building** initiatives will emphasize institution-building and skills-building at the national, regional and district levels, private sector partnerships, on-the-job mentorship, and distance learning.

1.2 Profiles of the surveyed regions

With nearly 24 million people, Ghana is one of the most populous countries in Sub-Saharan Africa (World Bank, 2011). Forty-four percent of Ghana's population live in urban centers (GDHS, 2009), with the Greater Accra Region and Kumasi hosting nearly half of the urban population. Administratively, Ghana is broken down into ten regions, with the majority of the country located inland. Ghana's coastline is comprised of four contiguous regions including, Greater Accra, Central, Western, and small portion of Volta.

Figure 1.1 Map of Ghana



Based on recommendations from the Government of Ghana, including the Ministry of Health and the Ghana Health Services, and USAID, Ghana Behavior Change Support is concentrating efforts to maximize impact by focusing on the following three regions: Greater Accra, Central Region, and Western Region.

Greater Accra Region

The population of the Greater Accra Region poses a number of health challenges. The region has a population of 3.8 million (Ghana in Figures, 2008), with 88% of Greater Accra categorized as urban (Ghana Health Services). The region faces overcrowding with low quality health services. According to USAID, the Greater Accra Region has received comparatively limited funding from health partners over recent years. The national health insurance scheme was introduced eight years ago but according to GDHS about 75% of women and 80% of men in the region remain uninsured (2008).

Central Region

The Central Region is classified as one of the poorest regions in Ghana, outside of the three northern most regions. The population is estimated at 1.8 million (Ghana in Figures, 2008) and is the second most densely populated region in Ghana (Ghana Health Services). Although the

region has been the focus of intensive USAID support, there is still an unequal distribution of health facilities favoring the urban areas. With 63% of the population living in rural areas (Ghana Health Services), the Central Region continues to face gaps in accessing quality health care. 75.6% of women and 76.7% of men do not have health insurance (GDHS, 2009).

Western Region

Bordering Cote d'Ivoire, the Western Region is the site of the offshore gas and oil exploitation, which has the potential to drive negative health outcomes. The population of the region is 2.4 million (GDHS, 2009), with the urban area and port of Takoradi. The majority of the population lives in rural agricultural areas, relying mainly on the production of cocoa, coffee, rubber, oil palm, coconut, black pepper and rice (Ghana Health Services). Similar to the Greater Accra and Central Regions, 57.4% of women and 70.3% of men are not covered under the national health insurance scheme (GDHS, 2009).

1.3 Study objectives

The overall objective of the longitudinal study is to evaluate the reach and impact of the Ghana BCS project. The study will include modules pertaining to BCS's topic areas for behavior change, which include:

- Family planning
- Maternal, neonatal and child health
- Malaria
- Hygiene and infectious diseases

The principal objectives of this longitudinal study are to: (1) provide measures of behavior, knowledge, attitudes, and exposure to messages and activities in relation to our topic areas; and (2) as much as possible, attribute changes in behavior, knowledge and attitudes to exposure to BCS social and behavior communication change activities.

1.4 Study implementation

The study was designed by the Ghana BCS research team and implemented by the Regional Institute for Population Study (RIPS) at the University of Ghana.

1.4.1 Sample design

A total of 1950 households, including 650 households from each region, were to be included in the study. A randomly selected household was considered eligible for inclusion into the study if there is at least one male 15-59 or female 15-49 in the household who is not planning on

moving in the next three years. Study participants included household heads, men 15-59 years and women 15-49 years in selected households.

Urban/rural sampling of enumeration areas (EA) approached proportionality to the urban/rural population distribution in each region. This sample size was calculated to allow detection of changes of $\pm 7\%$ or less at follow-up with statistical significance on most key indicators by region and by differentiating between urban and rural locations while allowing for a 25% attrition rate at follow-up.

The sample for the study was designed based on a multi-stage sampling design. The first stage utilized the 2000 Population and Housing Census EA maps for the three regions from the Ghana Statistical Service (GSS). The EAs for the three regions (Western, Central and Greater Accra) were first stratified by district and by rural/urban locality. A total of 98 EAs were systematically selected with probability proportional to the number of census households in each EA. This exercise resulted in the selection of 25, 38 and 35 EAs respectively for the Greater Accra, Central and Western regions.

At the second stage, a complete listing of all housing structures in the selected EAs was conducted. The household listing indicated the number of eligible women (15-49 years) and men (15-59 years) in each household. The selected households with eligible respondents (either women or men) were cumulated from the first household to the last.

At the third stage, using the cumulated household numbers containing eligible women, up to 30 households were randomly selected for interview. This was to take care of possible replacements in case it was not possible to interview a selected household due to refusal or unavailability of any household member during the period of the survey. Depending on the number of EAs selected in each of the regions, the number of households selected from any one EA varied in order that at the end 650 households would be interviewed in each of the three regions.

1.4.2 Questionnaires

Three data collection instruments were used for this study:

- Household questionnaire
- Women's questionnaire
- Men's questionnaire

The household questionnaire included modules on water and sanitation, socioeconomic status, and malaria. The men's and women's questionnaires included modules on personal characteristics, family planning, maternal health, neonatal health, breastfeeding, weaning and nutrition (women only), malaria, sanitation water and hygiene, community life, work finances

and decision making, and media exposure. The draft instruments were pre-tested and edited to produce the final questionnaires.

All data collection instruments were translated into Akan and Ga which are the major local languages spoken in the study regions.

1.4.3 Staff recruitment and training

Field workers were recruited from a pool of field workers RIPS had worked with previously. The 39 field staff included three supervisors, three field editors and three office editors. Supervisors and field editors were selected based on tested experience and commitment as either field supervisors and or editors in previous field surveys undertaken by the Institute. Office editors were graduate students (M.Phil) of RIPS who had been trained in questionnaire design, field data collection, and supervision and editing. They had also taken part in several field surveys in different capacities.

The field interviewers include men and women. They had either completed their first degrees at the University level or were continuing students at the undergraduate level. In addition, nearly all had prior fieldwork experience.

1.4.4 Data collection

The fieldwork was organized by creating three teams made up of ten interviewers and three field editors. Each team, headed by one supervisor, was assigned to carry out the fieldwork in one region. The duration of fieldwork was one month. Each team was provided with all the needed resources to ensure quality data collection.

All team members in each region moved as one team and, therefore, moved together from one EA to another. In each EA they moved in pairs (a man and a woman) for each day's data collection so that male respondents could be interviewed by male staff and the female staff could interview female respondents. In the field, interviewers were to ensure that only selected households and their eligible women and men were interviewed. In situations where the household members were not available, the team was to undertake call backs (up to three times) and if by the time they were leaving an EA, particular households were still not available to be interviewed they were to make replacements from the pool of sampled households.

As part of the quality control measures, the supervisors and field editors edited the completed questionnaires at the close of each day's activities. In addition, each team was assigned one researcher from RIPS to coordinate activities in the region to which he/she was assigned to ensure that procedures were rigidly followed. These researchers or coordinators paid visits to the field and sent along logistics including questionnaires and on their return brought back completed questionnaires for the office editors to review. Office editors also extracted

responses in respect to questions that required information on “other, specify” and also did the coding for the respective questions that were affected. The coordinators were supported by staff from the Johns Hopkins University’s Office in Accra in the monitoring of the field survey. When the office editors detected some errors in the completion of the questionnaires, they drew the coordinators’ attention to them and the coordinators in turn, brought them to the attention of the field supervisors and their respective field editors.

1.4.5 Data processing

Data processing was done at RIPS. Eight data entry clerks were recruited from a pool of persons RIPS had worked with in the past. They worked closely with the office editors and the key researchers on the project from RIPS. The computer programmer at RIPS first developed the data entry screens for the household, women and men questionnaires using the SPSS and EpiData software. He also assigned the data entry clerks their schedule of work after taking them through the data entry processes. In view of the review of the time schedule for the preparation of the report, double data entry could not be undertaken. However, data entry clerks were well supervised to ensure satisfactory work done. After the data entry, data cleaning was done by RIPS and JHU•CCP to correct errors, including those resulting from data entry.

1.4.6 Data weighting and analysis

The field teams had difficulty locating men in the households during the day, resulting in less than half as many men as women participating in individual surveys. A biostatistician at the Johns Hopkins Bloomberg School of Public Health was hired to weight individual men’s and women’s data so that the weighted data as closely as possible represented the populations of each of the three regions. This included adjustments according to sex, urban/rural spread, and region. Weights were calculated using the Taylor method.

Data exploration and analysis were conducted using Stata 11.0. Do-files were generated and used to ensure the correct population was included in the numerator and denominator of each indicator. Indicators and other summary statistics are presented in the following chapters.

2.0 Household and population characteristics

2.1 Urban-rural distribution of sample

Among the 1945 households sampled, 60.8% were urban and 39.2% were classified as rural according to the 2000 Census. The Greater Accra region, the most urban region overall of the three regions, had 84.0% of its household sampled from areas designated as urban.

Most households had electricity (82.5%), including 89.0% of urban households and 72.4% of rural households. The majority of households also had at least one mobile phone (83.1%), radio (77.4%), and television set (67.9%). However, ownership of these items was lower in rural areas than in urban areas and less than half of households in rural areas had a television set (49.5%). Car/truck and motorcycle ownership were low, at 8.2% and 3.3% respectively, with higher ownership in urban areas.

Table 2.1 Geographical distribution

Percent distribution of households, by region and urban/rural residence

Background characteristics	Proportion of households
<i>Residence</i>	
Urban	60.8
Rural	39.2
<i>Region</i>	
Western	
Urban	54.0
Rural	46.0
Central	
Urban	44.6
Rural	55.6
Greater Accra	
Urban	84.0
Rural	16.0

Table 2.2 Household electricity and durable goods

Percent distribution of households with electricity and common durable goods, by region and urban/rural residence (unweighted data)

Background characteristics	Electricity	Radios	Television	Mobile phones	Motorcycle	Car or Truck
<i>Residence</i>						
Urban	89.0	81.0	79.8	89.0	4.0	9.7
Rural	72.4	71.8	49.5	73.9	2.2	5.9
<i>Region</i>						
Western	78.2	77.2	61.4	81.4	2.0	4.0
Central	82.0	66.1	58.4	75.9	2.5	6.0
Greater Accra	87.3	89.0	84.2	92.1	5.4	14.8
Total	82.5	77.4	67.9	83.1	3.3	8.2

2.2 Population characteristics

Table 2.3 Population characteristics			
Age, education, religion, ethnic group and marital status of study participants			
Characteristic	Men	Women	Overall
Age group			
15-19	21.2 (222)	16.2 (364)	17.8 (586)
20-24	13.4 (141)	18.2 (409)	16.7 (550)
25-29	13.4 (140)	18.3 (412)	16.8 (552)
30-34	12.3 (129)	14.5 (325)	13.8 (454)
35-39	11.8 (124)	14.1 (316)	13.4 (440)
40-44	9.5 (100)	10.4 (230)	10.0 (330)
45-49	8.3 (87)	8.46 (190)	8.4 (277)
50-54	6.2 (65)	-	2.0 (65)
55-59	3.9 (41)	-	1.2 (41)
Highest level of school attended			
Not Applicable	6.7 (70)	18.3 (411)	14.6 (481)
Primary	13.4 (14)	19.3 (433)	17.4 (573)
Middle/JSS	48.2 (506)	41.6 (934)	43.7 (1,440)
Secondary/SSS	18.8 (197)	14.0 (314)	15.5 (511)
Higher	13.0 (136)	6.9 (154)	8.8 (290)
Religion			
Catholic	11.7 (123)	10.0 (225)	10.6 (348)
Anglican	2.3 (24)	1.6 (36)	1.8 (60)
Methodist	9.1 (95)	11.1 (250)	10.5 (345)
Presbyterian	5.2 (54)	5.4 (122)	5.3 (176)
Pentecostal/Charismatic	35.8 (376)	38.3 (861)	37.5 (1,237)
Other Christian	18.8 (197)	18.7 (421)	18.8 (618)
Muslim	8.7 (91)	10.9 (245)	10.2 (336)
Traditional/Spiritualist	.6 (6)	.6 (13)	.6 (19)
No religion	7.5 (79)	3.0 (67)	4.4 (146)
Other	.4 (4)	.3 (6)	.3 (10)
Ethnic group			
Akan	68.1 (714)	64.3 (1,445)	65.5 (2,159)
Ga/Dangme	7.4 (78)	7.8 (176)	7.7 (254)
Ewe	13.4 (140)	12.1 (272)	12.5 (412)
Guan	3.0 (31)	4.9 (109)	4.3 (140)
Mole-Dagbani	3.3 (35)	4.9 (109)	4.4 (144)
Grussi	.8 (8)	1.5 (34)	1.3 (42)
Gruma	.6 (6)	.5 (10)	.5 (16)
Not Ghanaian	1.6 (17)	1.7 (39)	1.7 (56)
Other	1.9 (20)	2.3 (52)	2.2 (72)
Marital Status			
Never married	37.1 (389)	29.3 (657)	31.6 (1,046)
Married	55.1 (578)	51.1 (1,147)	52.4 (1,725)
Living together	6.6 (69)	9.3 (209)	8.4 (278)
Divorced/separated	1.1 (12)	7.7 (173)	5.6 (185)
Widowed	.1 (1)	2.7 (60)	1.9 (61)

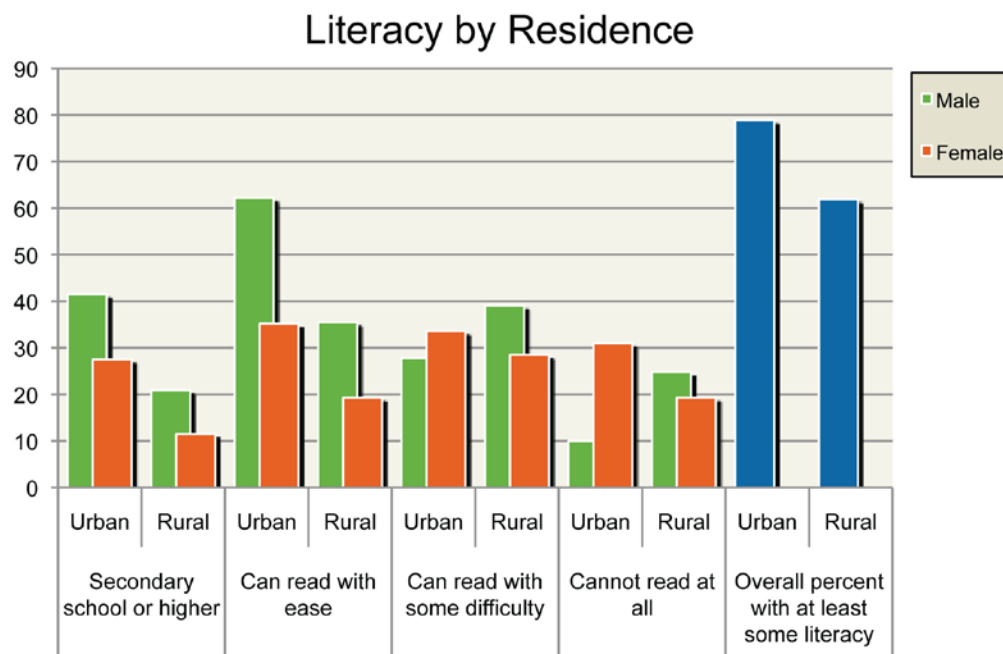
There are more people in the younger age groups than in the higher age groups, although the 15-19 age group represents more men (21.2%) and fewer women (16.2%) than expected. This pattern of fewer men and women in older five year age groups roughly approximates the pattern of Ghana's 2010 population pyramid as shown by the U.S. Census Bureau. Over 40% listed secondary school as the highest level of school attended. Almost three times as many women as men had never attended school (18.3% and 6.7% respectively).

The Akans were the most represented ethnic group, comprising 65.5% of the overall study population. The Ewes were the second most populous group in the study sample, comprising 12.5% with the Gas constituting 7.7% of the total population interviewed. Overall, 52.4% of the sample reported themselves to be married. A higher percentage of men (37.1%) than women (29.3%) reported never having been married. The two most common religions in the study sample were Pentecostal/Charismatic (37.5%) and Other Christian religion (18.8%). Muslims made up 10.2% of the study population.

2.3 Literacy and media

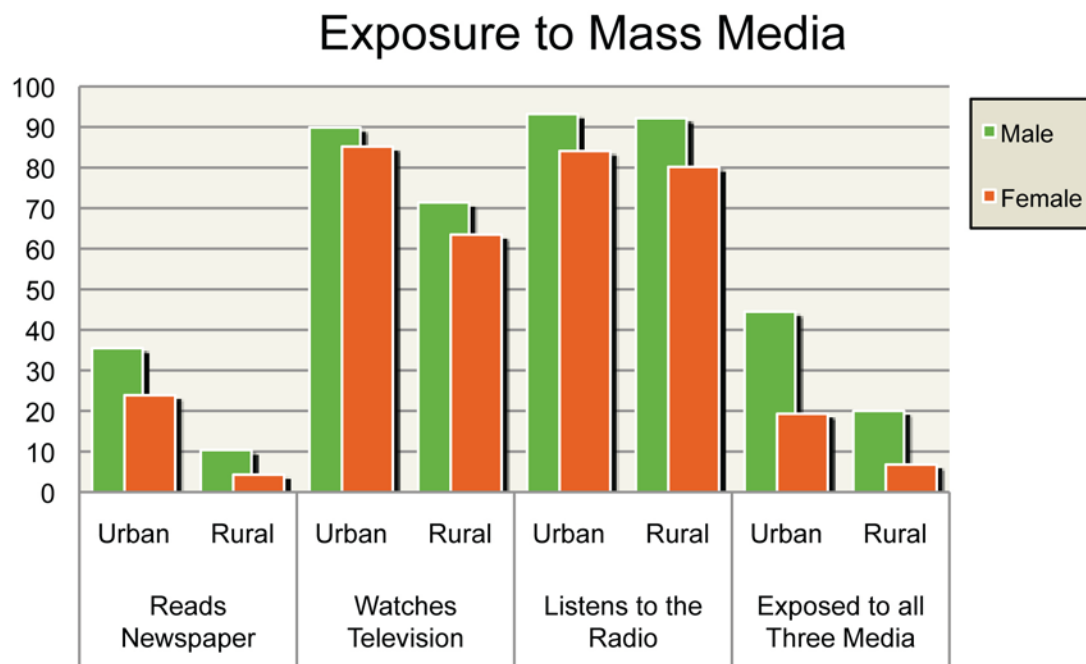
Overall, 72.7% of men and women reported at least some level of literacy. Literacy was higher for men than for women, with 51.8% if men and 29.8% of women reporting they could read with ease, while 15.7% of men and 37.9% of women reported they could not read at all. Literacy was also higher for those in urban areas.

Figure 2.1 Literacy



Radio has the greatest reach with 92.8% of men and 82.8% of women reporting they listen to the radio at least once per week. Television also has a strong reach, with 83.8% of men and 77.9% of women reporting they watch at least once a week. Newspapers, also limited by literacy, are read by 46.0% of men and 28.3% of women at least once a week. Overall, more than one-third of men (35.0%) but only 15.0% of women reported exposure to all three media at least once a week. Exposure to all was higher in urban than in rural areas.

Figure 2.2 Exposure to mass media



3.0 Family Planning

Family planning can significantly reduce maternal, neonatal and infant mortality. From 1988 to 2008, Ghana's total fertility rate (TFR) declined from 6.4 to 4.0. Use of modern contraceptive methods among married women rose from 10% to 19% from 1993 to 2003. The trend seems to have reversed, however. In the most recent (2008) round of the GDHS, use of modern contraceptives decreased to 17% and induced, possibly unsafe, abortion is rumored to be increasing (GDHS, 2009).

In the 2010 BCS survey, participants were asked about their fertility and contraceptive preferences; history of discussing contraception with family, friends and partners, and beliefs and attitudes around contraception.

3.1 Current use of contraception

Among adults married or living together, 37.5% of men and 32.9% of women reported using any contraceptive method with their partners. Meanwhile, 26.7% of men and 21.9% of women reported use of a modern method with partners. This is higher than the 17% of women currently using any modern method reported in the 2008 GDHS. Similar use of modern contraception was reported by women in urban (21.8%) and rural (22.3%) areas. However, at 18.4%, modern contraceptive use was lower in Greater Accra than in Western (24.5%) and Central (25.3%) regions.

Table 3.1 Current use of contraception						
Percentage of men and women married or living together using any contraceptive method and any modern contraceptive method						
Background characteristic	Any method			Any modern method		
	Male	Female	All	Male	Female	All
<i>Age</i>						
15-29	40.7	34.7	37.0	31.7	24.7	28.6
30-49	37.0	31.7	34.8	25.4	20.2	23.6
<i>Residence</i>						
Urban	38.1	32.9	35.5	47.2	21.8	32.8
Rural	37.3	32.9	35.3	49.2	22.3	35.6
<i>Region</i>						
Western	49.8	41.2	46	41.0	24.5	36.4
Central	40.6	37.9	39.3	58.6	25.3	37.5
Greater Accra	28.4	24.7	26.6	49.0	18.4	29.8
Total	37.5	32.9	35.5	26.7	21.9	24.8

Overall, the rhythm method was reported most frequently by men and women overall (25.5%). The next three most frequently reported methods used included injectables (23.3%), the pill (21.1%) and the male condom (19.3%). However, the male condom was reported considerable more frequently among men (25.6%) than among women (10.9%).

Figure 3.1 Current contraceptive use among men and women combined

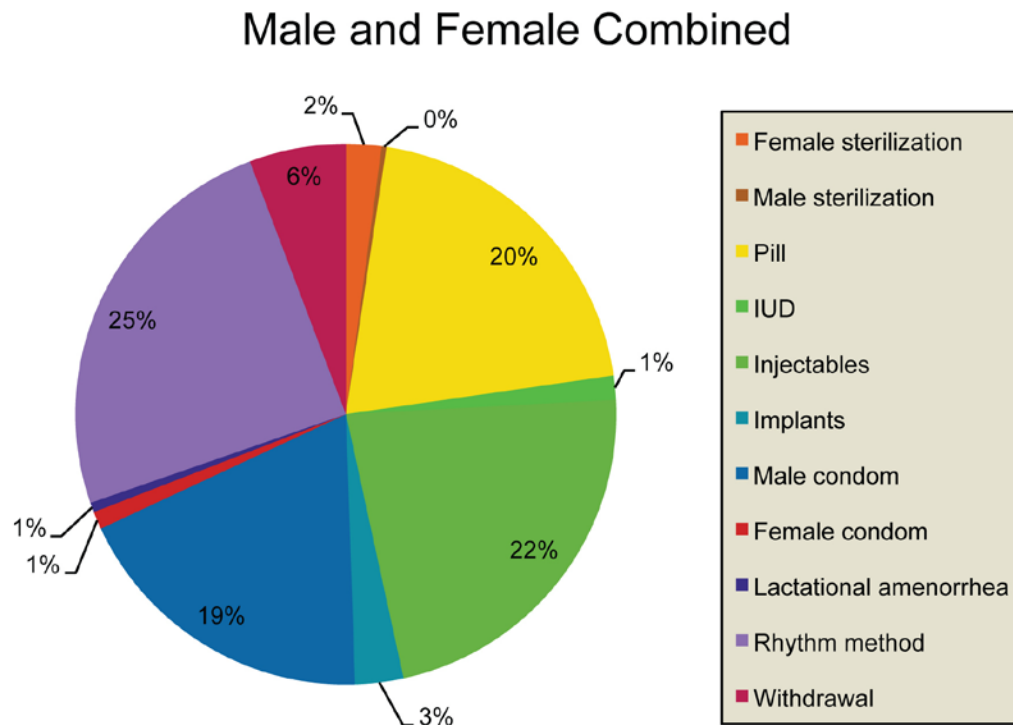
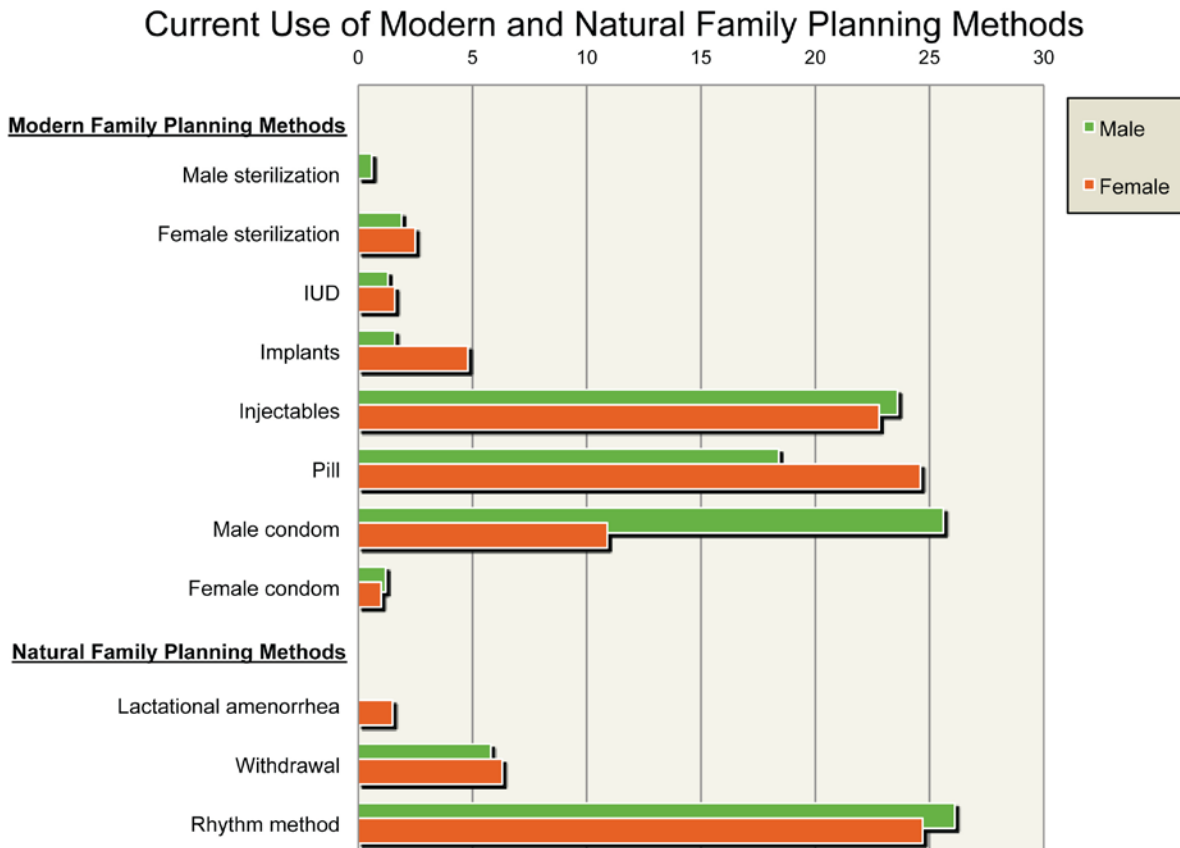


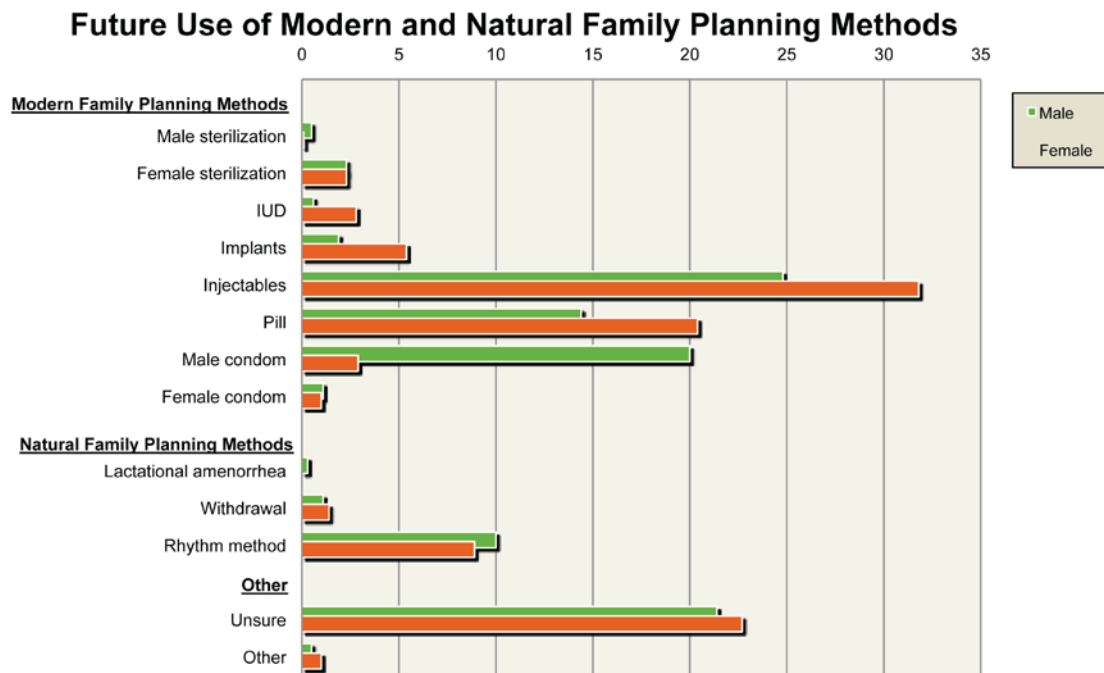
Figure 3.2 Current contraceptive use among men and women



3.2 Future use of contraception

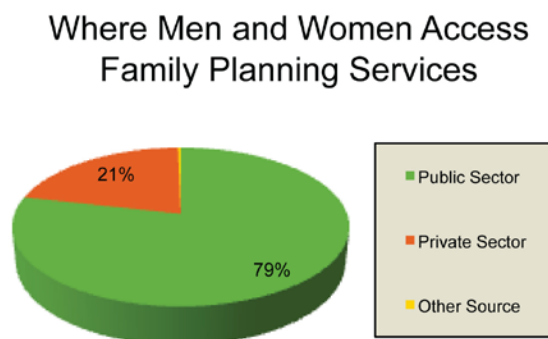
Among persons married or living together, 66.0% of men and 61.0% of women reported that they intended to use a contraceptive method to delay or avoid pregnancy in the future. Injectables were the method most frequently cited for future use by men (24.8%) and women (31.8%). After injectables, men intended to use male condoms (20.0%) and the pill (14.4%) most frequently in their relationship. Women also frequently reported intent to use the pill (20.4%). Intention to use the rhythm method was reported by 9.3% of men and women combined. Most strikingly, an overall 22.4% of men and women said they were unsure of which contraceptive method they would use in the future.

Figure 3.3 Desired contraceptive method among men and women intending to use family planning in the future



Among married men and women, 86.5% said they knew of a place where they could obtain a method of contraception. Among this group, 79% listed public sector sources, with government hospitals cited most often (61.4%).

Figure 3.4 Location men and women access family planning services



3.3 Fertility decisions and attitudes towards family planning

Most men (59.9%) and women (58.3%) said they wanted the same number of children as their spouse. However, men reported wanting more children (4.48) than women did (4.1). Rural men also wanted more children than men residing in urban areas (4.5 compared to 3.8). The same is true for women, who reported wanting a mean of 4.4 children in rural areas compared to 3.9 in urban areas. Additionally, 21.6% of men and 23.7% of women said they didn't know if they wanted the same number of children as their spouse or partner. The majority of respondents reported that choosing whether or not to use contraception is a joint decision (men 77.5% and women 67.1%).

Table 3.2 Fertility agreement and decision-making		
Relative number of children desired by couple and contraception decision-making power		
Statement	Male	Female
<i>Number of children wanted compared to spouse</i>		
Same number	59.9	58.3
More children	8.8	9.4
Fewer children	9.7	8.5
Don't know	21.6	23.7
<i>Choosing whether not to use contraception is mainly decision of</i>		
Respondent	7.5	19.7
Spouse	3.8	5.9
Joint decision	77.5	67.1

Most people surveyed reported personal approval of family planning for both spacing and limiting the number of births. More than three-quarters of men and about two-thirds of women also reported spousal approval towards child spacing and family planning.

Table 3.3 Personal and spousal approval of family planning among persons married or living together

Percentage of response given by men and women married or living together about their personal approval and their perceptions of their spouse's approval of family planning

Approval statement	Male	Female
<i>Personally approve of child spacing/FP for spacing</i>		
Yes	81.1	81.1
No	11.2	13.2
Don't know	7.7	5.8
<i>Personally approve of child spacing/FP for limiting child birth</i>		
Yes	82.0	80.6
No	11.3	13.4
Don't know	6.7	6.0
<i>Thinks spouse approves of other couples using FP for child spacing</i>		
Yes	75.8	65.7
No	14.6	18.5
Don't know	9.3	15.1
<i>Thinks spouse approves of selves using FP for child spacing</i>		
Yes	77.0	68.0
No	14.9	19.6
Don't know	7.9	11.8

Among women who reported not currently using contraception, the most frequently cited reasons for not using a method were fear of side effects (33.2%). The next most cited reasons were post-partum amenorrhea/breastfeeding (14.5%) and having infrequent or no sex (14.1%).

Table 3.4 Reasons for non-use of contraception

Percentage distribution of women married or living together with a partner, who are not using any contraceptive method but would like to wait before having another child or wish not to have more children

Reason	Age		Overall
	15-29	30-49	
Fertility-related reasons			
Infrequent sex/no sex	16.1	12.7	14.1
Menopausal/hysterectomy	0.6	6.7	4.2
Subfecund/infecund	0.0	0.5	0.3
Post-partum amenorrhea/breastfeeding	17.8	12.3	14.5
Opposition to use			
Respondent opposed	6.1	5.3	5.6
Husband/partner opposed	3.0	3.8	3.5
Others opposed	2.1	1.0	1.4
Religious prohibition	0.6	1.7	1.3
Lack of knowledge			
Knows no method	5.7	5.2	5.4
Knows no source	2.0	2.3	2.2
Method-related reasons			
Health concerns	3.3	8.0	6.2
Fear of side effects	31.1	34.5	33.2
Lack of access/too far	0.4	0.6	0.5
Costs too much	2.6	0.8	1.5
Inconvenient to use	3.3	4.0	3.8
Interferes with body's normal processes	6.1	8.4	7.5
Don't know	7.7	3.2	5.0

3.4 Perceived social norms for family planning

The community or social context plays a large role in use of modern contraceptives in Ghana. In a multilevel analysis of 1998 GDHS data, Stephenson et al. found that women who lived in communities with a higher level of approval for family planning were 3.8 times more likely to use a modern method, and this effect was even larger than the effect of partner approval for family planning. Thus perceived community approval of family planning strongly influences decision-making around contraception, and may even empower them to assert their preferences against their partner's wishes (Stephenson, Baschieri, Clements, Hennink, & Madise, 2007; DeRose, Dodoo, & Patil, 2002).

To assess perceived support for family planning, participants were asked, "out of 10 couples in this community, how many would you say are using a child spacing/family planning method?" The majority did not know how many couples in the community use a family planning method, indicating a low perception of social support for family planning. Perception of use is higher in Central and Western regions than in Greater Accra region. People in Greater Accra were also more likely not to know the proportion of couples using family planning in their communities.

Table 3.5 Perceived support for family planning					
Number of couples out of ten believed to be using family planning, according to sex, region, and urban/rural residence					
Background characteristics	Less than half		Half or more		Don't Know
	0-2	3-4	5-7	8-10	
Residence					
Urban	6.1	10.2	17.6	9.2	56.9
Rural	8.4	11.5	21.5	8.9	49.7
Region					
Western	9.2	12.0	22.1	9.0	47.7
Central	6.4	9.1	24.3	12.0	48.2
Greater Accra	5.9	10.8	14.3	7.5	61.5
Total	7.0	10.7	19.1	9.1	54.1

3.5 Communication with spouse about family planning

Partner communication is an important step along the path to adopting or continuing use of contraceptive methods. Partner communication allows couples to express their concerns around contraception, negotiate methods and timing, and marshal the necessary resources. In Ghana, women who have discussed family planning at least once or twice with their partner have 2.5 higher odds of using modern contraception. This ratio doubles when such conversations have happened more than twice (Stephenson et al., 2007).

Table 3.6 Spousal communication around family planning		
Percentage of each type of response to questions about spousal communication about family planning in the last twelve months		
Statement	Male	Female
<i>Talked with spouse/partner in last 12 months</i>		
Yes	51.7	39.7
No	48.0	60.3
<i>Initiator of last FP discussion</i>		
Respondent	61.6	58.1
Spouse	33.0	37.0
<i>Importance of spouse/partner's opinion on child spacing/FP</i>		
Very important	48.1	74.8
Somewhat important	4.1	14.8
Not important	0.5	9.8
Not stated	47.1	-
<i>Likelihood of discussing child spacing/FP with partner/spouse in next 12 months</i>		
Very likely	28.9	26.2
Likely	34.3	35.8
Not likely	32.8	33.0

In the surveyed regions, just under half (45.8%) of men and women married or living together reported having discussed family planning/child spacing with their partner in the past year, with more reporting in rural versus urban residence (50.1% vs. 43.0%). Men (51.7%) were more likely to report discussing family planning with their spouse than women (39.7%). Overall 68.2% of men and women reported that they were likely or very likely to discuss family planning within the next 12 months. The majority of both sexes reported being the initiators of this discussion, with 61.6% of men and 58.1% of women perceiving themselves as initiators of the discussion. When asked how much they valued their spouse's opinion with respect to family planning, women were considerably more likely to say that their spouse's opinion was somewhat or very important (89.6% and 52.2%, respectively). However, 47.1% of men did not state an answer, which could imply that they were uncomfortable giving a negative reply to the question.

Table 3.7 Communication with spouse about family planning			
Percentage distribution of men and women who have discussed family planning with their spouse/partner in the last 12 months			
Background characteristics	Men	Women	Overall
<i>Residence</i>			
Urban	47.3	39.0	43.0
Rural	57.8	40.9	50.1
<i>Region</i>			
Western	58.3	47.4	53.2
Central	51.7	40.1	45.5
Greater Accra	47.3	34.7	41.1
Total	51.7	39.7	45.8

3.6 Communication with family and friends about family planning

Social networks play a significant role in transmitting knowledge, beliefs and attitudes about family planning. Previous research in Ghana has shown that men who receive family planning information through their social networks are more likely to have family planning discussions with their wives and subsequently use a family planning method. Similarly, women who receive family planning information through social networks are more likely to initiate family planning. (Avogo & Agadjanian, 2008). Survey participants were asked whether they had discussed family planning with their family and friends. Overall, women were more likely (39.9%) to have discussed family planning with a family member other than their spouse or live-in partner in the past year than men were (24.9%). Also, 38.8% of women and 31.8% of men reported talking about family planning with a friend in the past year. Women who had communicated with their spouse or who reported talking with family or friends in the past year about family planning were more likely to be using a method of contraception than those who had not had a discussion.¹

¹ In logistic regression analysis, OR=5.92 for spouse; OR=1.97 for family and/or friends, p<.05

Table 3.8 Communication with family about family planning

Percentage distribution of men and women married or living with a partner who have discussed family planning with a family member other than their spouse in the last 12 months

Background characteristics	Men	Women	Overall
<i>Residence</i>			
Urban	25.3	42.1	34.6
Rural	24.2	35.8	30.0
<i>Region</i>			
Western	23.4	37.7	31.2
Central	27.3	32.7	30.5
Greater Accra	24.7	45.4	35.0
Total	24.9	39.9	32.9

Table 3.9 Communication with friends about family planning

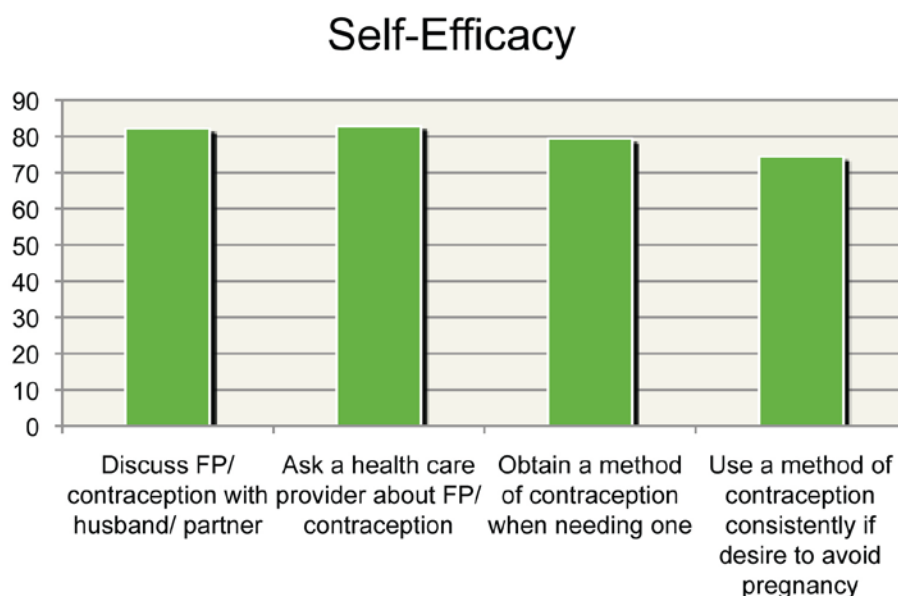
Percentage distribution of men and women married or living with a partner who have discussed family planning with a friend in the last 12 months

Background characteristics	Men	Women	Overall
<i>Residence</i>			
Urban	32.9	41.3	37.2
Rural	30.1	33.8	31.7
<i>Region</i>			
Western	32.1	41.0	36.0
Central	29.4	32.4	31.0
Greater Accra	32.7	41.3	36.9
Total	31.8	38.8	35.2

3.7 Self-efficacy for using contraceptives

Most women reported efficacy for four aspects of contraceptive use. Among women married or living with a partner, 82.2% reported they could or definitely could discuss family planning/contraception with their husband or partner, while 82.9% said they could or definitely could ask a health care provider about family planning/contraception. In addition, 79.4% said they could obtain a method of contraception when they need one and 74.4% said they could or definitely could use a method of contraception consistently if they desired to avoid pregnancy.

Figure 3.5 Percentage of women married or living with a partner reporting self-efficacy for family planning actions



3.8 Additional attitudes towards family planning

Attitude questions were also asked along four domains related to family planning: gender norms, quality of life, health and safety, and religion and values. Overall 95.4% of men and women agreed that husbands and wives should discuss the number of children they want to have, however, 34.4% of men and 28.3% of women agreed that the husband should be the one to decide whether the couple should use a child spacing/family planning method.

Table 3.10 Agreement with gender related statements related to family planning				
Percentage of men and women married or living together who agree or disagree with gender related statements about family planning				
Statement		Male	Female	All
<i>The husband should be the one to decide whether the couple should use a child spacing/family planning method</i>				
Agree		34.4	28.3	31.3
Disagree		60.8	63.4	62.2
<i>Husbands and wives should discuss the number of children they want to have</i>				
Agree		95.7	95.2	95.4
Disagree		2.0	2.3	2.1
<i>A woman should continue bearing children until she has at least one son</i>				
Agree		13.6	14.6	14.1
Disagree		82.5	82.2	82.3
<i>A woman who has no children is not complete</i>				
Agree		39.8	39.4	39.6
Disagree		53.1	52.8	53.0

Overall, 67.6% agreed that modern child spacing/family planning methods are safe and effective, while 49.3% agreed that the use of child spacing is permitted only for the sake of the mother.

Table 3.11 Agreement with health and safety statements related to family planning			
Percentage of men and women married or living together who agree or disagree with health and safety statements about family planning			
Statement	Male	Female	All
<i>Modern child spacing/family planning methods are safe and effective if correctly used</i>			
Agree	68.8	66.4	67.6
Disagree	7.0	8.0	7.5
<i>Use of child spacing is permitted only for the sake of the health of the mother and child</i>			
Agree	45.6	52.9	49.3
Disagree	34.8	30.2	32.5

When asked about quality of life issues, 87.8% agreed that child spacing helps parents take better care of their children while 74.4% agreed that couples who practice child spacing/family planning have a better quality of life than couples who do not.

Table 3.12 Agreement with quality of life statements related to family planning			
Percentage of men and women married or living together who agree or disagree with quality of life related statements about family planning			
Statement	Male	Female	All
<i>Couples who practice child spacing/family planning have a better quality of life than couples who do not</i>			
Agree	76.3	76.4	76.4
Disagree	7.3	7.0	7.2
<i>Child spacing helps parents take better care of their children</i>			
Agree	86.7	88.8	87.8
Disagree	3.3	2.0	2.6
<i>The practice of child spacing will improve the relationship of the couple</i>			
Agree	79.1	80.9	80.0
Disagree	5.8	4.7	5.2

In addition, 57.6% of men and 64.8% of women agreed that the number of children a couple has is only for God to decide. Finally, 65.5% agreed that family planning is worth paying for.

Table 3.13 Agreement with religion and values statements related to family planning

Percentage of men and women married or living together who agree or disagree with religion and values statements about family planning

Statement	Male	Female	All
<i>(Respondent's) religion condemns the use of modern child spacing/family planning methods</i>			
Agree	19.2	18.9	19.1
Disagree	54.7	55.1	54.9
<i>The number of children a couple will have is for God only to decide</i>			
Agree	57.6	64.8	61.2
Disagree	37.0	29.2	33.0
<i>It is good to have many children because one is not sure who among them will be rich enough to care for the parents at old age</i>			
Agree	17.7	22.5	20.2
Disagree	78.4	73.0	75.7
<i>Family planning is worth paying for</i>			
Agree	65.3	65.7	65.5
Disagree	13.2	13.2	13.2

4.0 Maternal health

At 580 deaths per 100,000 pregnancies, maternal mortality is high in Ghana. It is the second leading cause of death for women of reproductive age. Fourteen percent of deaths among women aged 12-49 are attributable to complications suffered during delivery and the postpartum period (GDHS, 2009).

4.1 Antenatal care visits

Table 4.1 Number of antenatal care visits

Percentage distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, according to age, region, and urban/rural residence

Background characteristics		Percent who had 4 or more ANC visits
<i>Residence</i>		
Urban		90.1
Rural		82.3
<i>Region</i>		
Western		86.2
Central		84.5
Greater Accra		89.6
Total		87.1

Among women who had a live birth in the past five years, 87.1% attended four or more ANC visits. Attendance was higher in urban (90.1%) than in rural areas (82.3%).

The survey population listed many reasons women should go to a health facility during a normal delivery. The two most frequently mentioned reasons were to confirm the baby's condition (78.7% of men and 83.0% of women) and to examine the mother (71.9% of men and 71.6% of women). About a quarter of the population also said to have a safe delivery (30.2% of men and 22.2% of women) and to detect problems in a timely manner (25.8% of men and 23.7% of women).

Table 4.2 Reasons a woman should go to a health facility during a normal pregnancy

Percentage of women and men with children under five who stated each reason a women should go to a health facility during a normal pregnancy

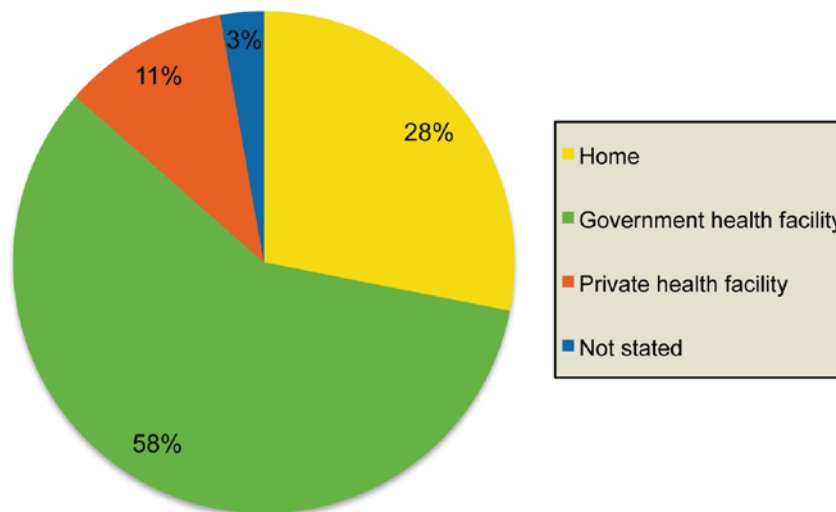
Reasons	Male	Female
Examine the mother	71.9	71.6
Confirm baby's condition	78.7	83.0
Detect problems	25.8	23.7
Receive tetanus shot	1.8	1.7
Obtain iron tablets	6.0	7.1
Receive malaria prophylaxis	7.9	10.8
Learn about emergency plans	4.2	2.7
Have a safe delivery	30.2	22.2
Learn about danger signs	4.0	5.7
Other	0.3	0.2

4.2 Delivery

The majority of women surveyed who gave birth in the last five years said they delivered their youngest child in a government health facility (58.4%). However, more than one in four (28.1%) delivered at their home.

Figure 4.1 Location women gave birth to last child

Location Women with Children Under-Five Delivered their Last Child



Most women stated their last delivery was attended by a nurse or midwife (62.9%) while 17.2% said their delivery was attended by a physician.

Table 4.3 Persons who assisted with last delivery of a child under five

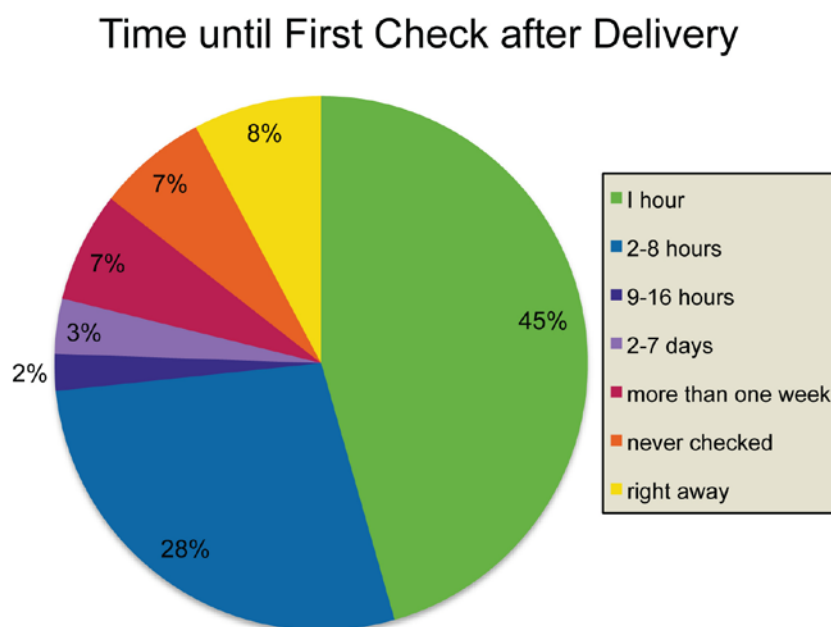
Number of each type of assistant mentioned divided by total number of women who gave birth in the last five years (multiple responses possible for respondents)

Place	%
Doctor	17.2
Nurse/midwife	62.9
Auxiliary midwife	1.5
Community health office/nurse	0.6
Trained traditional birth attendant	14.0
Untrained traditional birth attendant	2.8
Community/village health volunteer	0.5
Traditional practitioner	1.9
Family/friend/relative	5.2

Most women had someone check on their health the same day they delivered, including 41.1% who were checked within an hour of birth and an additional 25% who were checked within

eight hours of birth (but more than one hour). However, 6% did not have their health checked until more than one week post-delivery and an additional 6% never had their health checked after delivery.

Figure 4.2 Time until first post-delivery check



When asked why a woman should go to a health facility during delivery, over two –thirds of men (70.0%) and women (67.5%) said to have a safe delivery. To examine the mother, confirm the baby’s condition and detect problems were also frequently cited reasons.

Table 4.4 Reasons a woman should go to a health facility during delivery		
Reasons women and men with children under five give for women to delivery in a health facility		
Reasons	Male	Female
Examine the mother	48.6	41.1
Confirm baby’s condition	47.7	40.4
Detect problems	30.2	31.9
Have a safe delivery	70.0	67.5
Learn about danger signs	5.3	4.8
Other	0.5	2.7

Among women who did not deliver in a health facility, the most frequently cited reasons were that the facility was too far and/or they did not have transportation (26.3%), it was not

necessary (21.0%), the facility service hours were not convenient (13.6%) and the facility costs too much (11.6%).

Table 4.5 Reasons reported for not delivering in a health facility	
Number of reported for each reason divided by total number of women who have given birth in the last five years (multiple responses possible for respondents) who did not deliver their last child in a health facility	
Place	%
Costs too much	11.6
Facility not open	0.8
Too far/no transport	26.3
Don't trust facility/poor quality	4.8
Not first child	3.3
Not necessary	21.0
Family didn't think it was necessary	1.9
No one to accompany her	2.6
Inconvenient service hours	13.6
Afraid to go	3.8
Other reasons	2.0

4.3 Supplements during pregnancy

Among women who gave birth at least once in the last five years, 59.5% said they took iron tablets or syrup every day during their last pregnancy. However, 19.5% did not remember how often they took an iron supplement and 9.2% said they did not take iron syrup or tablets at all. In addition, 17.5% of women reported ever eating clay during their last pregnancy. Women were more likely to report eating clay in rural areas than in urban areas (21.0% and 15.3% respectively).

4.4 Awareness of dangers signs

Part of receiving the appropriate care during pregnancy and delivery is the ability to recognize danger signs that indicate care is needed from a health facility. The danger sign most widely recognized by men and women was severe vaginal bleeding (54.5%). Also commonly cited as danger signs were severe pain in the abdomen (26.5%), a very long labor (24.3%) and severe weakness (21.6%). However, 3.9% said they did not know any danger signs.

Table 4.6 Danger signs and symptoms during pregnancy or delivery requiring attention at a health care facility

Percentage of men and women who've had at least one child in last five years stating danger sign requiring attention at a health facility

Reasons	Men	Women	Overall
Severe vaginal bleeding	53.0	55.8	54.5
Loss of consciousness	5.2	8.8	7.1
A very long labor	26.0	22.4	24.3
Abnormal positioning of the child	14.9	15.6	15.3
High fever	13.3	11.7	12.4
Severe headache	11.3	11.9	11.6
Swelling of hands/feet	12.0	10.3	11.1
Seizures/convulsions	2.5	1.5	1.9
Severe pain in abdomen	27.8	25.3	26.5
Severe weakness	22.0	21.2	21.6
Doesn't know	3.8	3.8	3.9

Severe vaginal bleeding was also the most widely recognized danger sign for women postpartum (53.5%). After vaginal bleeding, the most frequently cited danger signs were anemia/excess fatigue (17.6), placental retention longer than 30 minutes (17.4%), and high fever (14.2%). But, 15.0% of men and 7.4% of women said they did not know any danger signs or symptoms postpartum.

Table 4.7 Danger signs and symptoms during postpartum requiring attention at a health care facility

Percentage of men and women who've had at least one child in last five years stating postpartum danger sign requiring attention at a health facility

Reasons	Men	Women	Overall
Severe vaginal bleeding	48.6	58.1	53.5
Loss of consciousness	8.5	11.2	9.9
Anemia/excess fatigue	17.5	17.6	17.6
Placental retention longer 30min	16.9	17.8	17.4
Vaginal discharge with bad odor	2.1	2.4	2.2
High fever	14.3	14.1	14.2
Seizures/convulsions	3.3	3.0	3.1
Difficulty breathing	8.1	4.3	6.1
Swelling of hands/feet	8.8	7.4	8.1
Blurred vision	3.0	2.8	2.9
Severe headache	12.4	12.3	12.3
Severe vomiting	5.1	8.8	7.0
Doesn't know	15.0	7.4	11.1

4.5 Reasons a woman's care can be impeded

Table 4.8 Reasons a woman's care can be impeded during pregnancy, delivery and after birth care

Percentage of women stating each reason care can be impeded

Reasons	Women
Does not know where to go	0.9
Health service is too far away	15.7
Does not have transport	22.9
Very expensive	67.0
Does not have anyone to care for children	2.8
Fear of mistreatment	16.8
Services not of good quality	3.5
Family does not let her	0.6
Does not know	10.3

A woman who would otherwise want care may have additional obstacles to receiving the care that she needs. The most common reason stated for impeding women from receiving care during pregnancy was care being very expensive (67.0%). Two additional frequently cited reasons were related to distance: health service is too far away (15.7%) and the woman does not have transportation (22.9%). In

addition, 16.8% said that women may fear mistreatment.

5.0 Infant and Child Health

Until recently, Ghana's infant and under-5 mortality rates stagnated. From 1990 to 2000, infant mortality decreased from 75 to 71 deaths per 1,000 live births; in the same time period child mortality decreased from 125 to 117. The past few years, however, have seen significant improvements. In 2008, infant mortality decreased to 51 and under-5 mortality decreased to 81 per 1,000 live births. While some causes of infant and child mortality have decreased in importance, the proportion of neonatal deaths is increasing (30 per 1,000 live births), representing over a third of under-five mortality and two thirds of infant mortality (World Health Organization, 2010).

5.1 Awareness of danger signs for newborns and children under five years of age

While structural issues such as cost and transportation may contribute to delays in treatment, many delays occur before children's caregivers attempt to contact the health care system. Recognizing that children may be at risk is an important first step in caregivers' health-seeking behavior. The 2010 BCS survey asked male and female participants to list symptoms that would cause them to bring their child to a health care facility right away and to list the most serious problems that could endanger the life of a newborn within the first 48 hours after delivery.

Among men and women surveyed with at least one child under the age of five, 84.8% were able to list at least one danger sign among newborns in the first 48 hours of life that requires care at a health facility. The most commonly cited danger signs were does not cry (29.2%), difficulty breathing (21.4%) and doesn't nurse/difficulty suckling (20.6%). The baby being pale, bluish or yellowish in complexion was mentioned by 9.9% and being too small was reported by 12.8%.

Table 5.1 Danger signs and symptoms during the first 48 hours after birth requiring attention at a health care facility

Percent of men and women who've had at least one child in last five years stating danger sign after birth requiring attention at a health facility, Ghana 2010.

Reasons	Men	Women	Overall
Difficulty breathing	22.7	20.2	21.4
Too small	12.8	12.8	12.8
Too cold or trembles	3.9	4.5	4.2
Purple	1.3	1.1	1.2
Pale, bluish or yellowish complexion	10.2	9.5	9.9
Doesn't nurse/difficulty suckling	16.8	24.2	20.6
Does not cry	29.7	28.8	29.2
High fever	12.3	19.2	15.9
Bleeding from cord/navel	15.8	11.2	13.4
Doesn't know	19.3	11.5	15.3

In contrast, 97.5% of men and women with at least one child under five could mention at least one reason to bring their child under five immediately to a health facility for care. The most commonly cited reasons to bring a child to a health facility immediately were fever (51.3%), not eating/breastfeeding (31.1%), seizures/shaking (18.4%) and getting sicker/not getting better (18.0%). Difficulty breathing was mentioned by 16.4%.

Table 5.2 Symptoms that would cause you to take a child under five to a health facility immediately

Percent of men and women who've had at least one child in last five years stating symptoms for children under five requiring immediate attention at a health facility

Reasons	Men	Women	Overall
Fever	49.8	52.8	51.3
Seizure/shaking	18.6	18.1	18.4
Not eating/not able to breastfeed	30.4	31.6	31.1
Drinking poorly	1.9	3.5	2.8
Getting more sick/not getting better	17.4	18.6	18.0
Fast breathing	6.0	2.4	4.1
Difficulty breathing	18.2	14.7	16.4
Chest indrawing	1.0	1.5	1.3
Blood in stool	5.1	8.5	6.8

5.2 Infant and young child feeding practices (IYCF)

The past 20 years has seen some, if little, improvement in Ghanaian children's nutritional status. Stunting has decreased from 31% to 29% and the proportion of children underweight has decreased from 20% to 14% (2010 World Health Statistics). The rate of these improvements could be increased by optimizing feeding practices between birth and two years of age. Optimal feeding practices, especially exclusive breastfeeding up to 6 months of age, has the single greatest potential impact on child survival, with the potential to prevent 1.4 million under-5 deaths in the developing world (Black, et al., 2008). A further 6% or 600,000 under-five deaths can be prevented by ensuring optimal complementary feeding. (Jones, Steketee, Black, Bhutta, & Morris, 2003). Recommended infant and young child feeding (IYCF) practices include timely initiation of solid/semi-solid foods from the age 6 months and increasing the amount and variety of foods and frequency of feeding as the child gets older, while maintaining frequent breastfeeding. (Mukuria, Kothari, & Abderrahim, 2006). Adherence to these practices improves children's nutritional status and child survival. The 2010 BCS survey asked

Table 5.3 Initial breastfeeding

Percent of infants born in the last five years who were given breastmilk within the first hour, first day and after first day of life

Background characteristics	Percent		
	Within one hour	Less than one day	More than one day
<i>Residence</i>			
Urban	49.0	38.5	12.5
Rural	36.0	42.6	21.4
<i>Region</i>			
Western	30.0	49.6	20.4
Central	39.4	44.1	16.5
Greater Accra	57.9	30.0	12.1
Total	44.0	40.1	15.9

Table 5.4 Given drink other than breast milk within three days of delivery

Percent distribution youngest children under five who were given something to drink other than breast milk within three days of being born

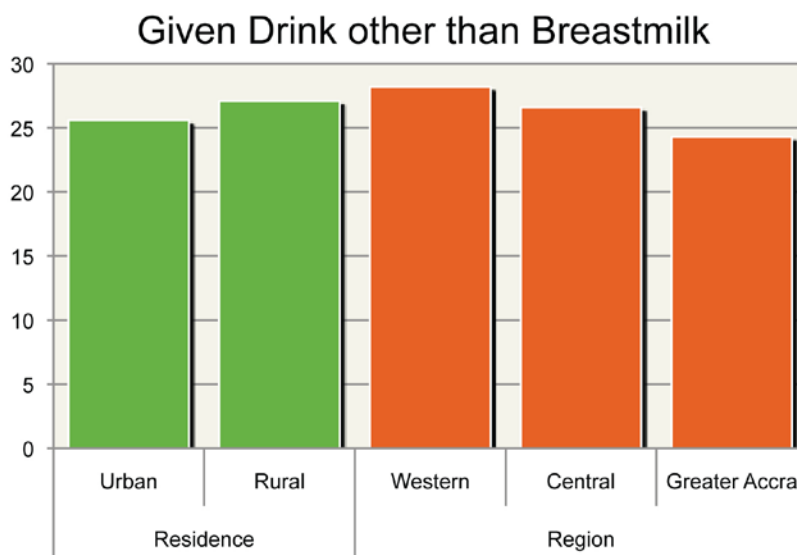
Background characteristics		Percent
<i>Residence</i>		
Urban		25.6
Rural		27.1
<i>Region</i>		
Western		28.2
Central		26.6
Greater Accra		24.3
Total		26.2

mothers about breastfeeding, initiation of solid foods, and foods consumed by the child on the previous day.

Among the youngest child under five years of age at the time of data collection, 44.0% were given breast milk within one hour of birth and another 40.1% were given breast milk after one hour but within the first day of life. Infants in rural areas were twice as likely as those in urban areas to not be given breast milk until after the first day of life (21.4% vs. 12.5%). In addition, 26.2% were given something to drink other than

breast milk during their first three days of life.

Figure 5.2 Percent of youngest children under five given something other than breast milk to drink during the first three days of life



The three key IYCF indicators quantify consumption of breast milk or other milk/milk products, food diversity (number of food groups consumed), and frequency of feedings. To meet minimum IYCF standards for nutrition, a child 6-8 months who is breast fed must also consume at least three food groups, with two non-breast milk groups given at least twice per day. Breastfed children 9-23 months must consume at least three food groups and receive food

other than breast milk three times or more per day. Children who are not breastfeed are considered to meet the standards if they are fed four or more groups per day and fed at least four times daily (Macro International Inc., 2010).

Table 5.5 Infant and young child feeding (IYCF) practices				
Percentage of children age 6-23 months living with their mother who are fed according to three IYCF feeding practices, by breastfeeding status, number of food groups consumed and number of times they were fed during the day and night preceding the survey, by region and urban/rural residence				
Among all children 6-23 months, percentage fed				
Background characteristics	Breast milk or milk products	Minimum food groups *	Minimum number of feedings	With all 3 IYCF practices
<i>Age (months)</i>				
6-8	96.7	30.42	75.3	29.1
9-11	100	62.9	59.7	38.5
12-23	84.0	74.0	60.2	42.1
<i>Sex</i>				
Male	91.5	59.0	60.0	35.9
Female	87.4	67.8	65.1	41.7
<i>Residence</i>				
Urban	88.1	69.1	70.0	43.1
Rural	90.7	56.9	53.6	33.7
<i>Region</i>				
Western	89.4	54.8	55.1	29.8
Central	89.6	69.0	57.7	42.1
Greater Accra	88.9	66.7	71.1	43.5
Total	89.3	63.8	62.6	39.0

Only 39.0% of children under five were reported to have met all three IYCF standards. However, 89.3% of children 6-23 months did receive breast milk or milk products in the previous 24 hours, including 96.7% of children 6-8 months. Overall, 63.8% were given the minimum number of required food groups, but only 30.4% of children 6-8 months were fed the minimum number of groups. Also, 62.6% of children were given the minimum number of feedings. At 75.3%, children 6-8 months were most likely to receive the minimum number of feedings. There was a trend for children to be more likely to meet all three IYCF standards with increasing age: 29.1% of children 6-8 months met the standards, while 38.5% of children 9-11 months and 42.1% of children 12-23 months met the IYCF standards. Those living in urban areas were also more likely to meet the IYCF standards than those in rural areas (43.1% vs. 33.7%).

6.0 Malaria

In 2008, there were 3.2 million reported cases of malaria in Ghana, a startling number considering the population size of 23 million (World Health Organization, 2010). Malaria accounts for more than 44% of reported outpatient visits and 22% of under-5 mortality in Ghana (Roll Back Malaria, 2005). Reported malaria cases represent only a small fraction of the actual number of malaria episodes in the population because the majority of people with symptomatic infections are treated at home and are not reported.

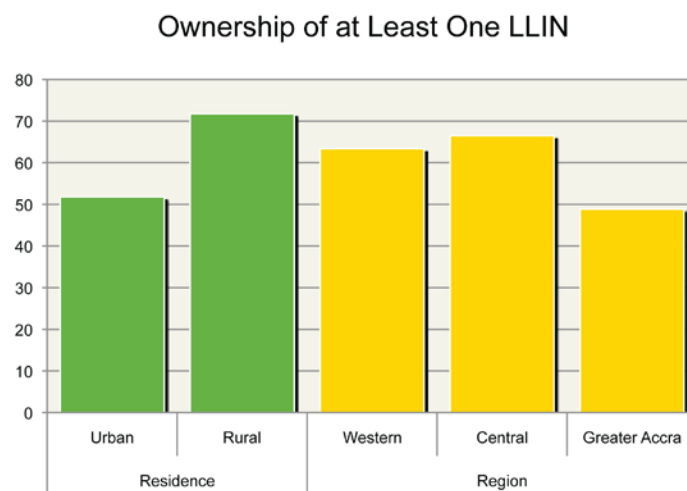
Pregnant women and children under five are most vulnerable to malaria and several interventions have been developed to reduce their risk. Insecticide-treated bed nets kill malaria-bearing mosquitoes and create a physical barrier between mosquitoes and humans. Pregnant women are advised to take an antimalarial medicine, sulphadoxine-pyrimethamine (SP), at monthly visits during the second and third trimester. In the survey, participants were asked about exposure to malaria messages, attitudes and awareness toward malaria prevention, ownership and utilization of insecticide-treated bed nets (ITNs), use of IPTp, and fever management in children under five.

6.1 Ownership of nets, including long lasting insecticidal nets (LLIN)

Research on long lasting insecticidal nets (LLIN) has shown that LLIN provide adequate protection against malaria infection in the population (Takken, 2002). Less than two thirds of households (59.6%, data unweighted) owned at least one LLIN. LLIN ownership was higher in rural areas (71.7%) than in urban areas (51.8%) and was lower in Great Accra (48.9%) than in Western and Central regions (63.4% and 66.5% respectively). Households reported owning a total of 1945

nets of any kind, of which 919 or 47.2% were reported as not used the previous night. However, this 47.2% is likely to be a small underestimate as 17 households had more nets than data could be collected on in the household survey.

Figure 3.1 Percent of households with at least one LLIN



6.2 Utilization of nets, including LLIN by pregnant women and children under-five years of age

Table 6.1 Utilization of insecticide treated bed nets by children under five

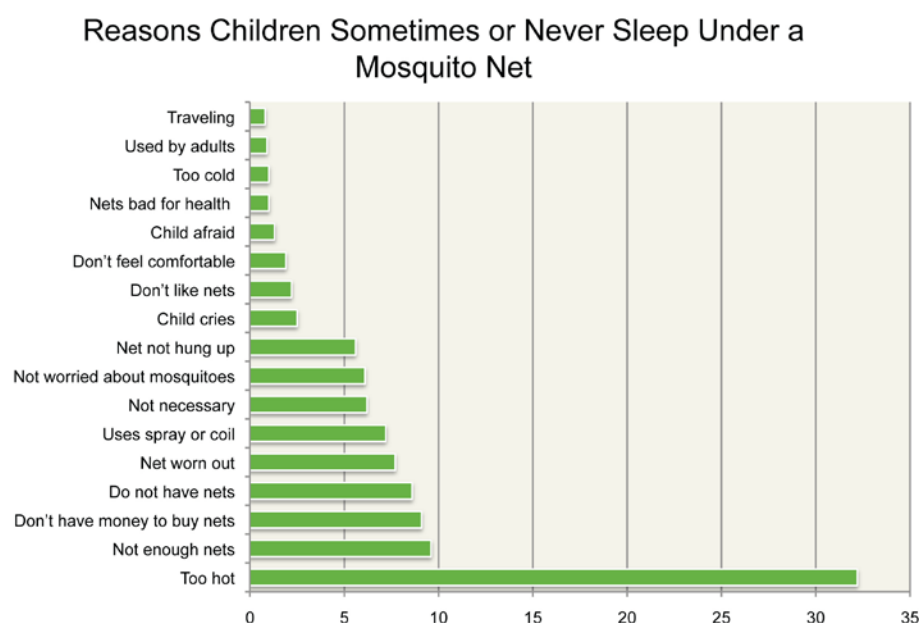
Percentage of children under five among all households who slept under any net and LLIN in the past night by region and urban/rural residence, Ghana 2010 (unweighted data)

Background characteristics	Among children under five in all households, percentage who slept under any net the past night		Among children under five in all households, percentage who slept under an LLIN the past night	
	Male	Female	Male	Female
<i>Residence</i>				
Urban	30.8	24.8	23.2	16.5
Rural	49.6	47.3	37.1	36.3
<i>Region</i>				
Western	42.1	40.2	36.2	34.9
Central	40.7	39.8	28.4	27.8
Greater Accra	36.6	23.7	23.8	12.1
Total	40.2	35.3	30.2	25.8

Among the under fives, 40.2% of boys and 35.3% of girls slept under any mosquito net the previous night, while 30.2% of boys and 25.8% of girls slept under LLIN. Use was higher in rural than in urban areas and use was lower in Greater Accra region than in Western and Central regions. Among men and women surveyed

in households with children, 32.0% reported that the children in the household always sleep under nets, while 27.4% reported that children sometimes use nets. However, 39.4% reported the children in their household never sleep under mosquito nets. The reasons most frequently cited for children in the household using a net periodically or never were nets are too hot (32.2%), not having enough nets (9.6%) not having enough money to buy a net (9.1%) and not having nets (8.6%).

Figure 6.2 Percentage reporting reasons children do not sleep under mosquito nets



According to weighted women's data, 30.6% of pregnant women reported sleeping under a net the previous night, while 26.4% of pregnant women were reported to sleep under any net in the unweighted household data (as reported by the household head or representative). Only 22.1% of pregnant women were reported to have slept under a net last night according to household data. Net use was higher among pregnant women in rural than in urban areas in every category of use. Net use was also highest in Central Region and lowest in Greater Accra. Women's survey data may be more accurate than household survey data as a household head or representative may not be aware of a woman's pregnancy status, however LLIN specific use is not available from the women's survey data.

Table 6.2 Net use among pregnant women

Percentage of pregnant women who slept under any net and under an LLIN the previous night

Background characteristics	Among pregnant women 15-49 in all households, percentage who slept under any net the past night (weighted women's survey data)	Among pregnant women 15-49 in all households, percentage who slept under any net the past night (unweighted household data)	Among pregnant women 15-49 in all households, percentage who slept under an LLIN the past night (unweighted household data)
<i>Residence</i>			
Urban	18.8	20.0	15.3
Rural	50.5	33.3	29.5
<i>Region</i>			
Western	32.1	21.7	21.7
Central	48.2	37.3	28.8
Greater Accra	18.2	18.2	13.6
Total	30.6	26.4	22.1

6.3 Utilization of nets, including LLIN by the general population

Among all 8,551 persons captured in the household survey, 23.6% slept under a mosquito net the previous night, while 17.4% slept under LLIN. Among adult men and women self-reporting in the individual surveys, 26.6% reported sleeping under any net the previous night. The reasons most commonly stated by adult men and women for not using a net the previous night were: don't have a net (42.5%), the net is too hot (21.3%) and nets are uncomfortable (13.3%). In addition, 93.8% of men and women respondents said they do think they should sleep under a net. However, only 28.2% of people reporting they should sleep under a net reported sleeping under a net the previously night.

Table 6.3 Reasons given by participants for not sleeping under a net last night			
Percentage of men and women who did not sleep under a net last night reporting each reason for not using a net			
Symptoms	Male	Female	All
Don't have net	44.9	40.0	42.5
Don't like using nets	6.8	6.2	6.5
Nets don't fit	1.7	3.2	2.5
Too hot	18.3	24.3	21.3
Too cold	.2	.3	.2
Not enough air	1.2	1.5	1.4
Not necessary	8.6	7.0	7.8
Uncomfortable	12.5	14.1	13.3
Not enough nets	2.7	2.3	2.5
Nets not hung up	2.5	4.3	3.4
Used by children	1.3	.6	1.0
Not used when traveling	.4	.2	.3
Net worn out	3.6	5.6	4.6
Nets bad for health	.4	.4	.4
Use spray/coils/repellant	13.4	9.6	11.5
No mosquitoes	5.5	5.1	5.3
Don't know	.6	.9	.7

For children aged from infancy to 15 years of age, there is a decreasing trend in use of both any net the previous night and an LLIN the previous as children get older. Children under-five are more than twice as likely to have slept under a net the previous night as those aged 13-15. The 13-15 year age group is about one-third as likely to have slept under a net the previous night as children under three years of age.

Figure 6.3 Percent of children from birth to 15 who used any type of net the previous night

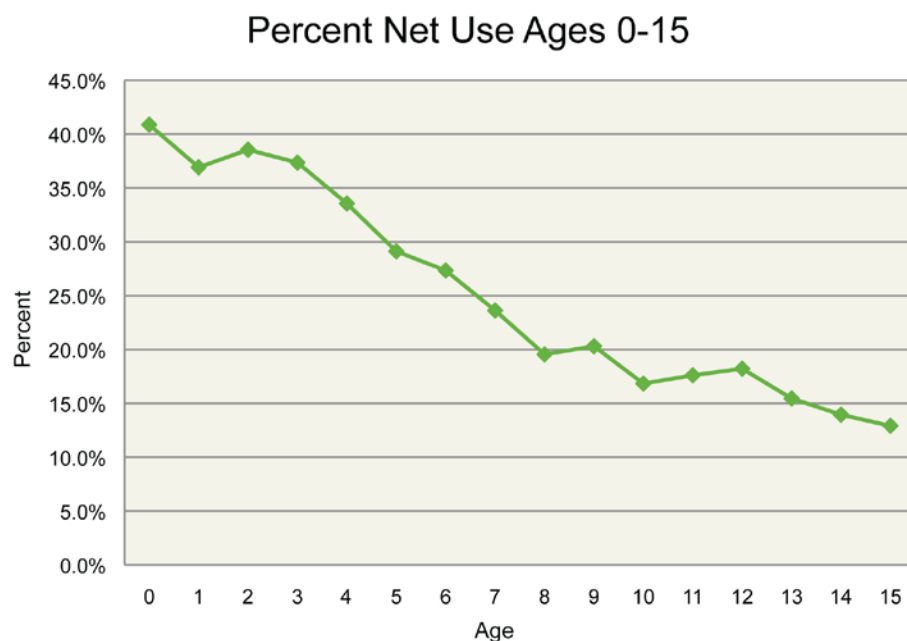
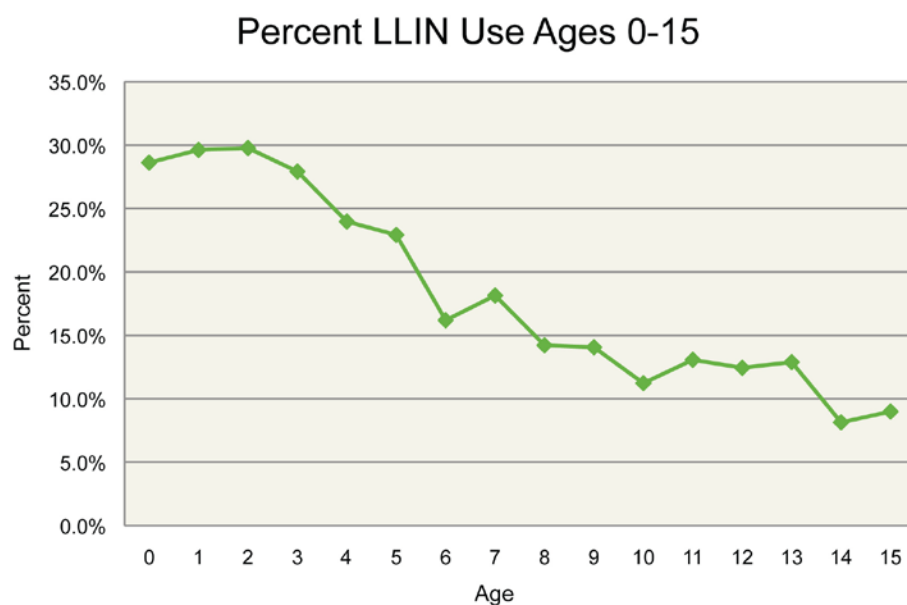


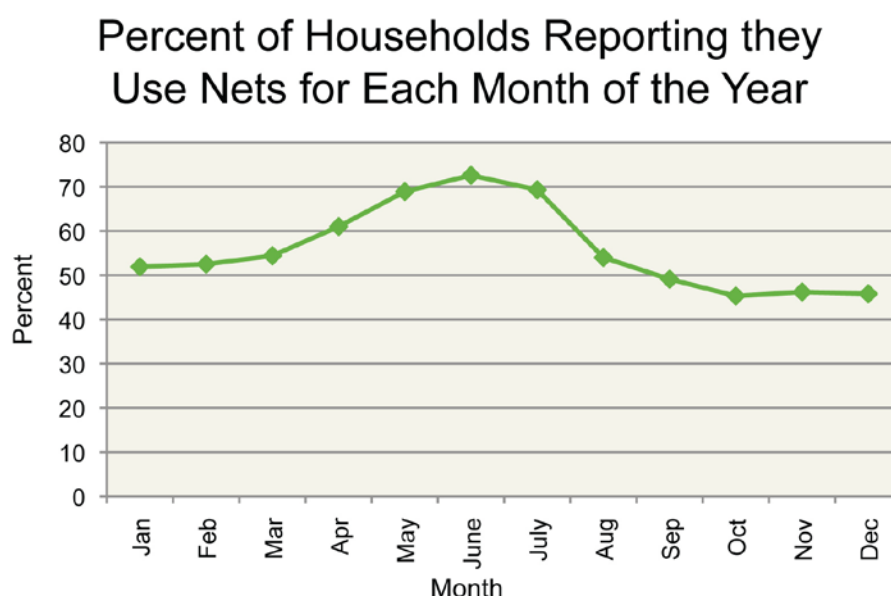
Figure 6.4 Percent of children from birth to 15 who used an LLIN the previous night



Among households that owned at least one mosquito net, nets were reported to be used most during months of the rainy season, with June as the peak (72.6% of households with nets

reporting use) and used least during the dry season (lowest use reported from September to December).

Figure 6.5 Percent of households reporting net use for each month of the year



6.4 Malaria prophylaxis during pregnancy

Table 6.4 Use of intermittent preventive treatment (IPTp)

Among women age 15-49 with a live birth in the five years preceding the survey, percentage who took any anti-malarial drug and of those who took SP/Fansidar during their last pregnancy

Background characteristics		Took any anti-malarial drug	Took SP/F	
			Took any SP/F	Took 2+ doses of SP/F
Residence				
Urban	86.5	26.2	19.3	
Rural	72.5	30.6	22.5	
Region				
Western	72.1	17.1	14.8	
Central	87.2	52.4	38.4	
Greater Accra	83.6	19.2	12.7	
Total	81.0	27.9	20.6	

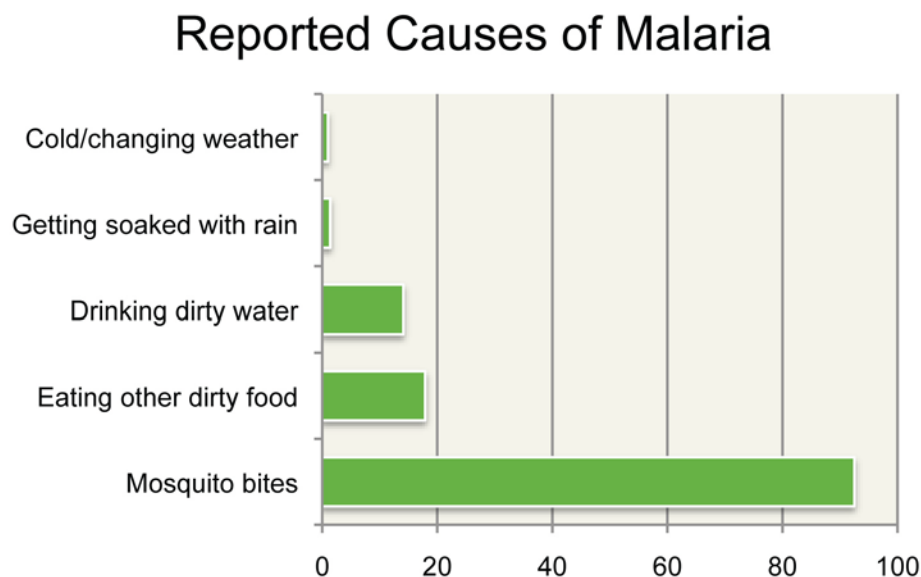
Among all women 15-49 who gave birth in the last five years, 81.0% reported taking any anti-malarial drug during their last pregnancy. Among those, 27.9% took SP/F and 20.6% took the recommended two or more doses of SP/F. Women in Central regions were more likely to have taken SP/F than women in Western and Greater Accra regions. Notably, 52.6% of women who reported

having taken any anti-malarial drug did not know what drug they took, so it is possible that the percent of women taking SP/F is higher.

6.5 Malaria knowledge

Most people sampled (92.5%) correctly identified mosquito bites as a cause of malaria. However, 17.9% identified dirty food and 14.1% identified drinking dirty water. This misconception could in part be explained by the fact that both can be related to diarrhea, nausea and vomiting, which many people also identify as a symptom of malaria (see below).

Figure 6.5 Causes of malaria reported by adults



Nearly everyone could name at least one method to protect themselves from malaria. Overall, 37.5% of adult men and women reported that sleeping under a net can protect them from malaria, while 36.0% reported sleeping under an ITN. Almost half (48.6%) cited keeping surroundings clean as a method of protection. However, 9.3% listed not drinking dirty water while 14.5% said to avoid eating bad food as methods of protection from malaria, which are misconceptions that may have implications for motivation to use other effective means of protection against malaria.

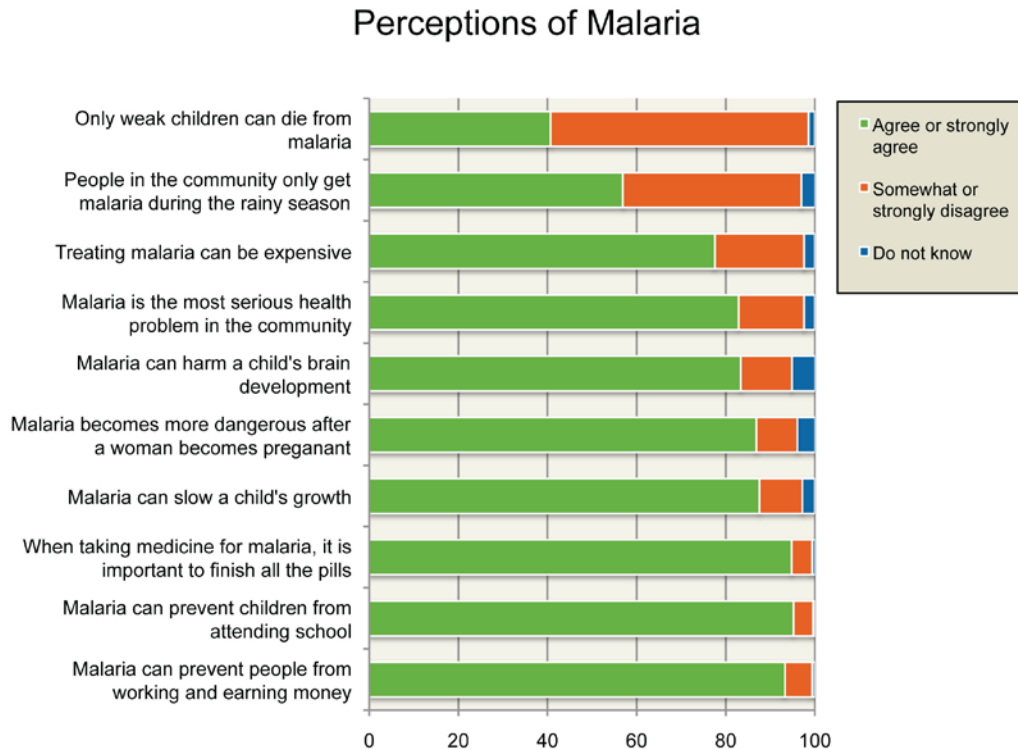
Table 6.5 Ways for people to protect themselves from malaria			
Percentage of men and women reporting each mode of protection against malaria			
Symptoms	Male	Female	All
Sleep under net	38.2	36.8	37.5
Sleep under LLIN	35.5	36.5	36.0
Mosquito repellent	8.7	6.7	7.7
Avoid mosquito bites	10.5	10.7	10.6
Prophylaxis	5.4	6.0	5.7
Spray house with insecticide	23.3	18.4	20.8
Use mosquito coils	21.7	16.7	19.1
Cut weeds/grass	14.6	15.5	15.1
Fill in puddles	17.3	16.4	16.8
Keep surroundings clean	49.2	48.0	48.6
Burn leaves	.8	1.1	1.0
Don't drink dirty water	8.2	10.2	9.3
Don't eat bad food	11.8	17.2	14.5
Screens on windows	2.6	2.8	2.7
Don't get soaked in rain	1.4	.2	.8
Don't know	.9	1.6	1.2

Nearly everyone interviewed could name at least one symptom of malaria, with the most common being feeling cold (54.7%), headache (43.4%), body weakness (30.8%), and fever (30.7%). For danger signs of severe malaria, people most frequently listed weakness (39.6%), chills/shivering (29.9%), vomiting (28.8%), not able to eat (25.0%), and very high fever (23.3%). The most common symptoms of malaria are fever (over 92%), chills (70%), and perspiration (64%). Common symptoms also include dizziness, malaise, nausea, vomiting, and diarrhea (Trampuz, Jereb, Muzlovic & Prabhu, 2003).

Table 6.6 Awareness of danger signs of severe malaria			
Percentage of men and women reporting each sign and symptom as a danger sign of severe malaria			
Symptoms	Male	Female	All
Seizure/convulsions	3.1	2.9	3.0
Unconscious	2.8	2.9	2.8
Any fever	10.2	7.6	8.9
Very high fever	24.1	22.4	23.3
Stiff neck	.8	.9	.8
Weakness	40.6	38.6	39.6
Not active	11.9	14.7	13.3
Chills/shivering	30.5	29.4	29.9
Not able to eat	25.5	24.5	25.0
Vomiting	28.5	29.0	28.8
Fainting	1.1	1.8	1.5
Crying all the time	.4	.4	.4
Restless/won't stay still	10.7	8.3	9.5
Diarrhea	3.8	3.8	3.8
Don't know	9.6	9.8	9.7

All individual survey participants were asked about their agreement with ten statements on perceptions of malaria. There was overwhelming agreement (over 90%) on three statements: that malaria can prevent children from attending school (95.2%), it is important to finish malaria medication even after feeling better (94.8%) and that malaria can prevent people from working and earning money. People were particularly mixed on two statements. First, 56.9% agreed or strongly agreed that people in the community could only get malaria during the rainy season, while 40.1% disagreed or strongly disagreed. Likewise, 40.7% agreed or strong agreed that only weak children can die from malaria while 57.9% disagreed or strongly disagreed with the statement. Better understanding of malaria and malaria risk for children throughout the year present two potential targets for risk communication.

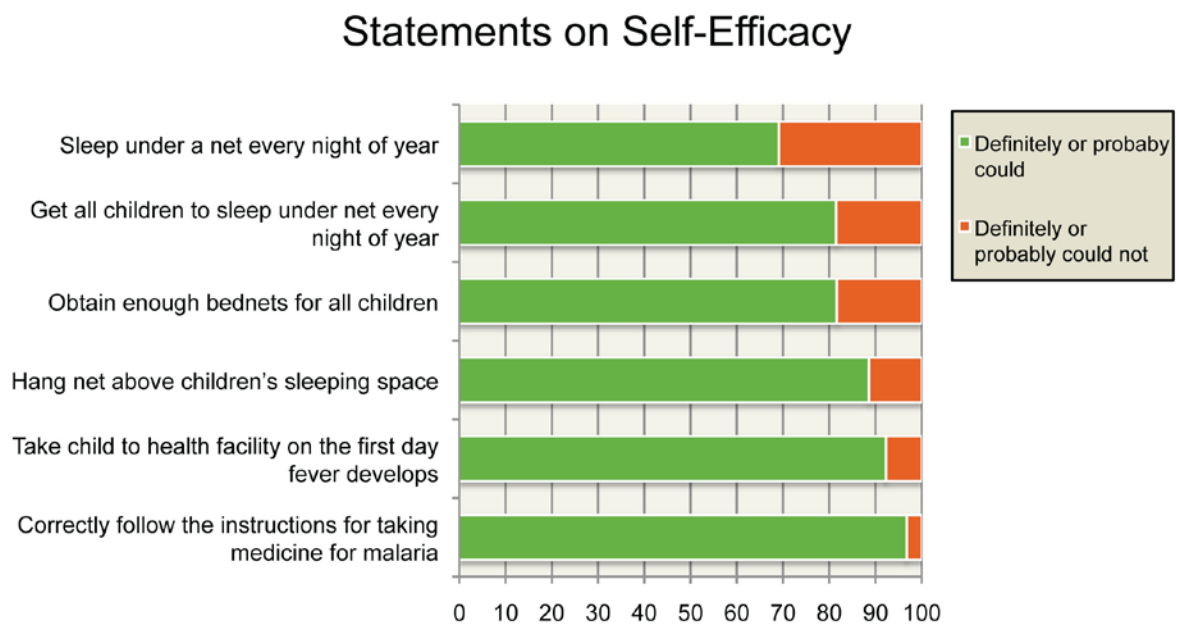
Figure 6.6 Perceptions of malaria among adults



6.7 Malaria self-efficacy

Men and women generally showed high self-efficacy in their response to six statements, with at least two-thirds of the study population stating they definitely or probably could do every action. The highest self-efficacy was shown for being able to correctly follow the instructions for taking medicine for malaria (96.8% said they definitely or probably could), while 92.3% said they definitely or probably could take their child to a health facility on the first day a fever develops. However, 30.9% said they definitely or probably could not sleep under a net every night of the year.

Figure 6.7 Self-efficacy statements related to malaria



7.0 Water, sanitation and hygiene

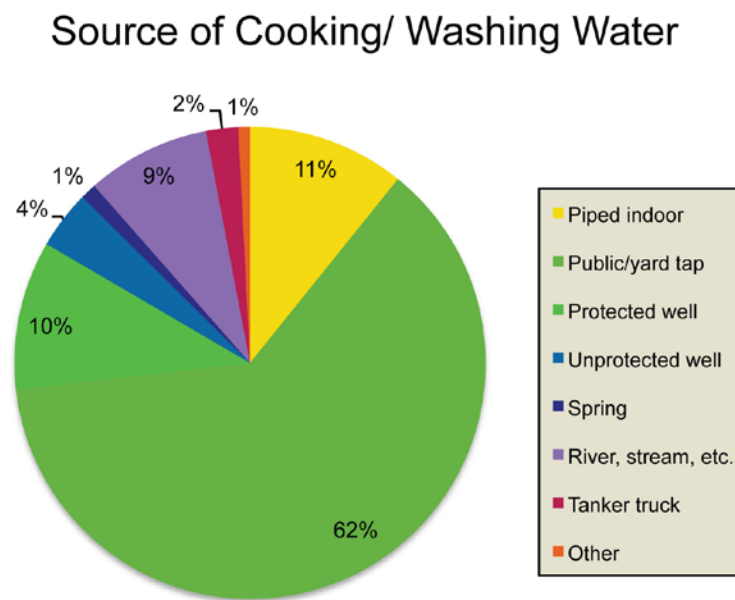
Diarrhea is the second leading cause of death in children under five years of age. In 2004, 1.9 million young children died as a result of diarrhea. Globally, each child experiences about 3 episodes of diarrhea per year (Boschi-Pinto, Lanata, & Black, 2009; Curtis & Cairncross, 2003). Hand washing with soap, especially after contact with feces, can reduce the risk of diarrhea by 42%, making it one of the most effective interventions available for reducing childhood mortality and morbidity (Curtis & Cairncross, 2003). Other occasions when it is critical to wash hands with soap include before food preparation, before eating, before feeding a child, and after washing a child.

In Ghana, the prevalence of diarrhea has declined in the last 20 years, from 26% in 1988 to 15% in 2003. However, the proportion of children with a diarrheal episode in the two weeks prior to the survey increased to 20% in 2008 (Macro International Inc., 2010). This survey did not ask about recent diarrheal episodes; instead it focused on diarrhea-related behavior such as hand washing, use of soap, safe water storage and water treatment.

7.1 Water sources and management

The most common source households reported for their cooking and washing water was a public tap or a tap in the yard near their house (64.4%). Also, 10.8% had their water piped indoors, and 10.2% obtained their cooking and washing water from a protected well.

Figure 7.1 Source of cooking/washing water



The main source of drinking water reported by households was also a public tap or tap in the yard near the house. However, 27.9% reported using sachets (water packaged in plastic bags) for their drinking water. About one in five households (21.1%) did not have to travel at all for their water. An additional 40.4% had their drinking water source within five minutes distance, and 19.4% between 6 and 10 minutes away. Just under three percent had to travel an hour or more to their drinking water source.

Figure 7.2 Main source of drinking water

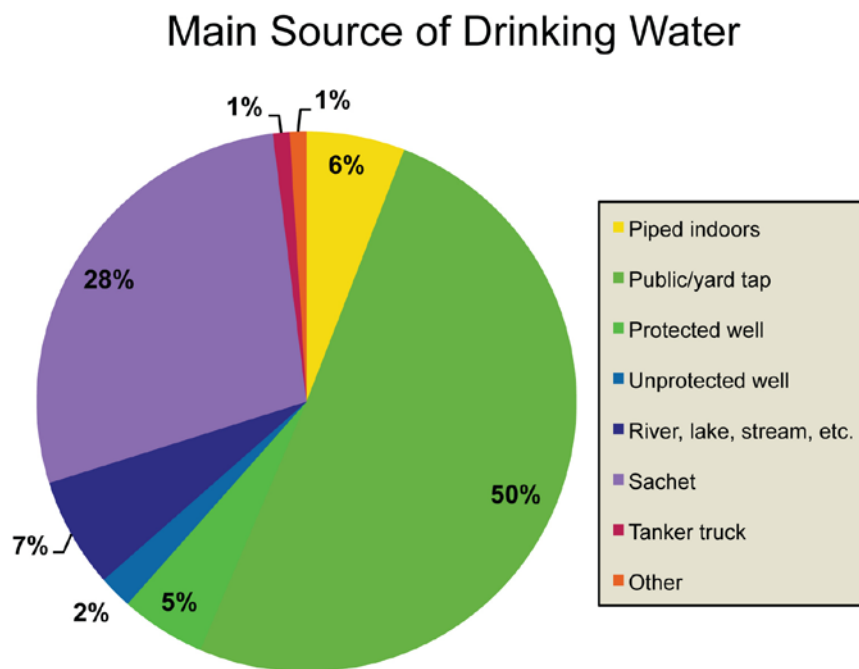
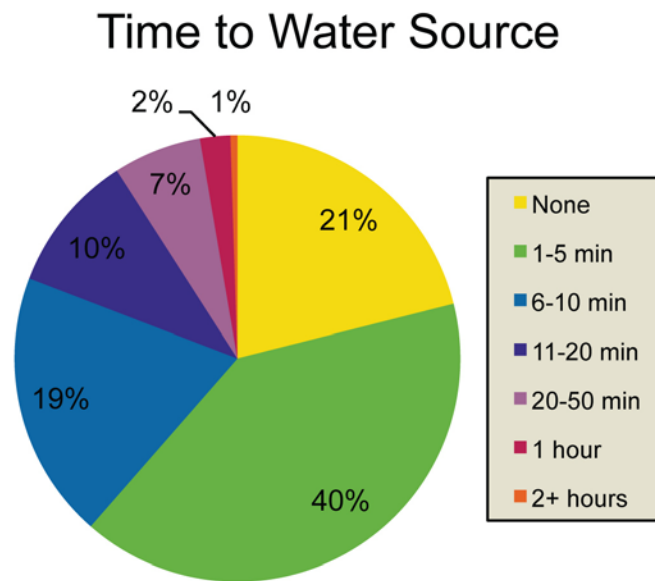


Figure 7.3 Time to water source.



Ghana Water Company was reported to manage the community water resources used by 41.8% of households, while private individuals managed community water resources for 28.9% of surveyed households. In 8.1% of households, it was unknown who managed the water resources in their community. In addition, only 3.4% of men and women surveyed said they were members of a water or sanitation committee. However, 74.4% of those not already members of a committee, said they would be willing to serve on a water or sanitation committee.

Table 7.1 Management of community water resources

Number of each type of manager divided by total number of households reporting

Place	%
Ghana Water Company	41.8
District/municipal assembly	1.8
Unit committees	8.0
Local wat/san committee	1.1
Town/village development committee	1.8
Traditional leaders	5.2
Private individuals	28.9
No one	2.2
Other	1.1
Don't know	8.1

7.2 Storage and treatment of drinking water

Nearly all households (91.1%) reported storing drinking water in their homes for more than one day. Of these households, 65.0% reported storing drinking water in a plastic or steel container with a lid. An additional 12.7% reported storing sachets of water.

Among those who store their water in a container with a lid, 61.9% reported that they have a lid that screws on or attaches tightly to the container. However, only 5.8% of these households said that these containers have a spigot, small mouth, or tap from which to pour water. If the water cannot be poured out, people often put their hands and cups, pails, bowls or other containers into their drinking water container, which can contaminate it.

Treatment of drinking water to make it safer was reported by 11.1% of households. Among this group, the most commonly reported methods of drinking water treatment were camphor (96 households), letting the water stand and settle (43 households), water tablets (24 households), boiling water (20 households) and straining through a cloth (12 households). Some of these methods, including letting the water stand and settle and straining water through a cloth, will have little to no impact on making water safer to drink.

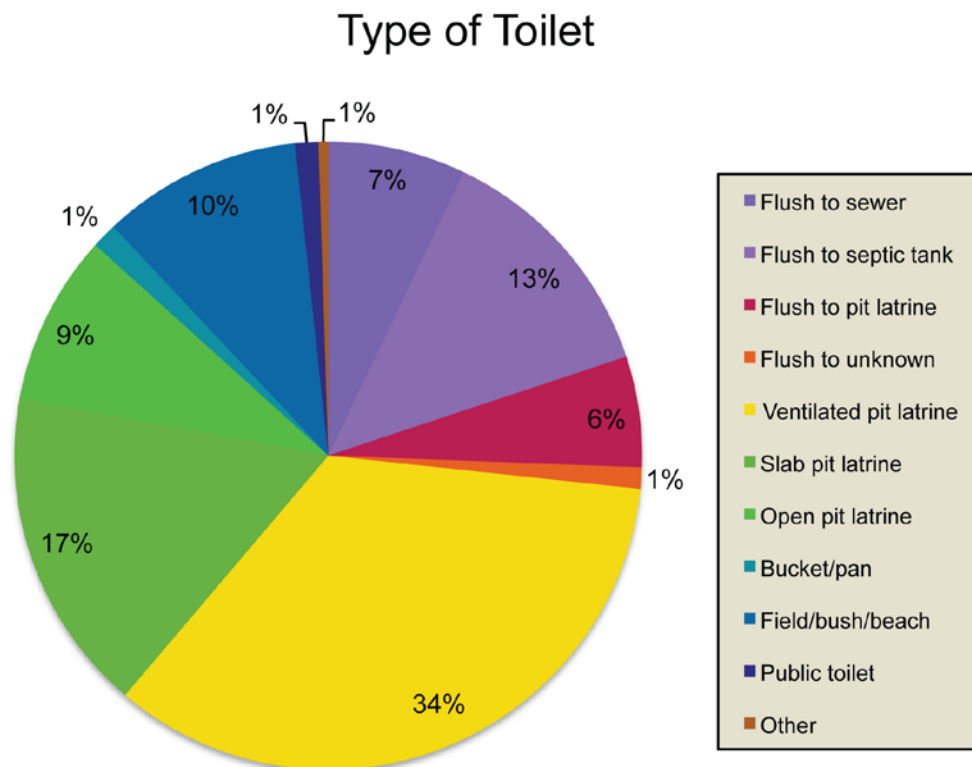
Overall, 34.7% of men and women surveyed individually said they had heard of water purification tablets. Among this group, 92.5% said they were willing to pay for these tablets. Among the entire adult population sampled, 91.2% said they would be willing to pay for programs that gave them access to clean water.

7.3 Sanitation and sanitation management

Ventilated pit latrines were most common and reportedly found in 34.5% of households surveyed. Slab pit latrines were use in 16.7% of households and toilets flushing to septic tanks

in 12.8%. However, about one in ten (10.3%) reported using the field, bush or beach for their household toilet.

Figure 7.4 Type of toilet



According to household survey data, 24.7% of households said their community sanitation resources are managed by the district or municipal assembly. Nearly one in five (18.5%) reported these resources are managed by private individuals. In addition, 9.0% said they didn't know who managed sanitation and 3.5% said they were managed by no one. Among men and women individually surveyed, 90.5% said they would be willing to pay for a program that gave them access to clean toilets or latrines.

Table 7.2 Management of community sanitation resources

Percentage of each type of manager reported by households
(unweighted data)

Place	%
Ghana Water Company	2.7
District/municipal assembly	24.7
Unit committees	12.2
Local wat/san committee	3.3
Town/village development committee	4.9
Traditional leaders	6.0
Private individuals	18.5
No one	3.5
Other	1.1
Don't know	9.0

7.4 Sanitation and children under five

Nearly half of those taking care of children under five reported that these children defecate in a chamber pot or pail (48.3%). In addition, 22.3% said children use diapers. However, nearly ten percent said children defecate in the ground inside or outside of the house.

Table 7.3 Places children under five defecate

Percentage of women who take care of at least one child
under five reporting each place children under five
defecate

Place	%
Flush toilet	5.3
Pit latrine	3.7
Bucket latrine	7.5
Pour/flush latrine	1.8
Diaper	22.3
On ground in house	4.7
On ground outside house	5.2
Public toilet	1.4
Chamber pot/pail	48.3
Bush/beach	4.1

When asked where the youngest child's stools were discarded, women caring for children under-five reported most frequently that they were thrown into a toilet or latrine (40.2%). An additional 15.2% reported they are thrown outside in the yard or bush and 11.2% said they are thrown in the refuse dump. They are not disposed of according to 1.3% of women surveyed.

7.5 Hand washing

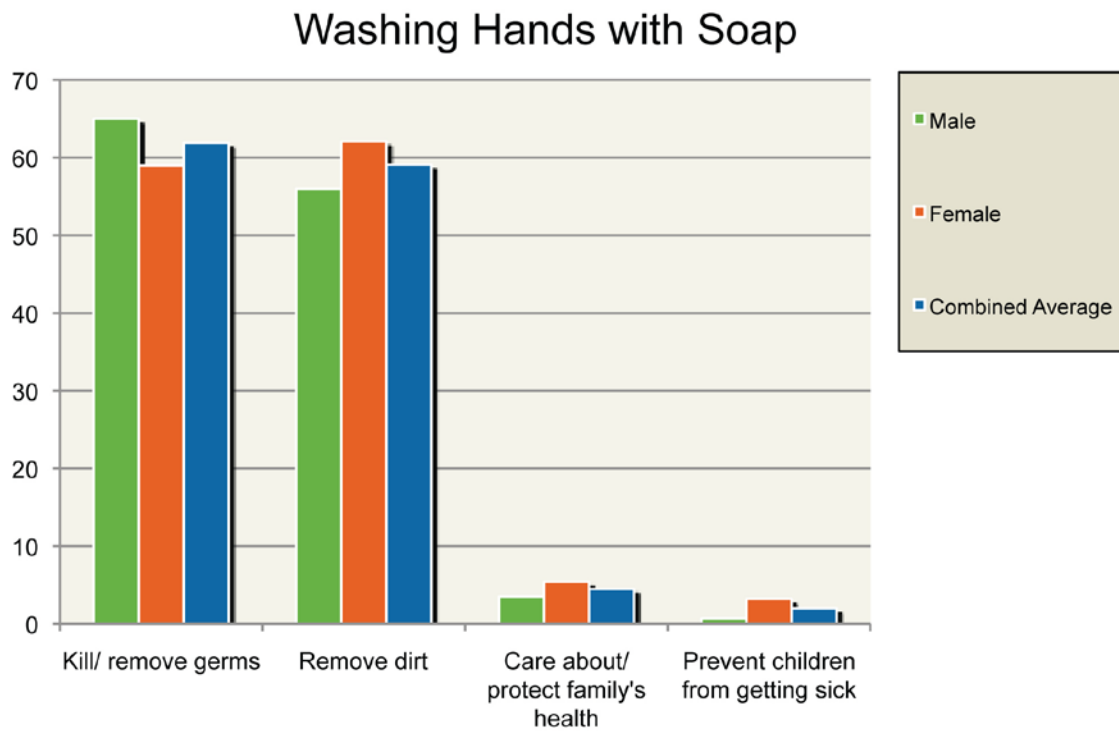
Nearly everyone surveyed washed their hands at least once the previous day and 96.5% washed their hands with soap at least once the previous day. The most commonly reported occasions for washing one's hand were before eating (84.5%), after coming from the toilet (75.7%) and after eating (71.3%). Washing one's hands with soap was most frequently reported after coming from the toilet (63.8%). However, rates of washing ones hands with soap was much lower before eating (31.0%) and after eating (33.1%). In addition, while 10.1% of women said they had washed their hands after cleaning a child's bottom, 6.8% reported doing so with soap (this denominator includes women who may not have a small child they are caring for). The reasons most commonly given for using soap to wash hands were killing/removing germs and removing dirt.

Table 7.4 Occasions for washing hands yesterday

Percent of men and women surveyed stating on which occasions they washed their hands at all and with soap the previous day

Occasion	Washed hands yesterday			Washed hands yesterday with soap		
	Men	Women	Overall	Men	Women	Overall
Before preparing food	6.0	38.6	22.4	0.5	11.0	5.8
Before eating	86.5	82.5	84.5	33.1	29.1	31.0
Before feeding child	1.3	9.2	5.3	0.6	4.3	2.5
Before prayer	6.8	6.0	6.4	0.4	0.9	0.6
After cleaning child's bottom	1.8	10.1	6.0	1.3	6.8	4.1
After coming from toilet	75.6	75.8	75.7	61.7	65.9	63.8
After eating	74.5	68.1	71.3	34.6	31.5	33.1
After feeding child	1.0	4.3	2.7	0.6	2.3	1.4
After preparing food	1.8	17.6	9.8	0.4	6.0	3.3
After cleaning house	5.8	14.8	10.4	2.5	5.8	4.2
Wash hands/face	15.3	12.0	13.6	1.8	1.2	1.5
Having/giving bath	35.7	36.7	36.2	28.4	28.0	28.2
Cleaning utensils	5.5	18.4	12.0	3.2	13.7	8.5
Washing clothes	2.9	10.8	6.9	2.9	8.3	5.6
All occasions	-	-	-	11.4	12.0	11.7
Did not wash hands/Did not wash with soap	.3	.1	.2	4.0	3.0	3.5

Figure 7.5 Percentage reporting each reason men and women wash hands with soap



8.0 Attitudes toward equitable gender norms and other social factors

Gender norms are messages from society that dictate appropriate behavior for males and females. When women are expected to have lower or no input into couple-level or household decision-making, they are less likely to use condoms and other contraception. They are more likely to be at risk of violence, unplanned pregnancies and STIs/HIV. Gender norms also affect the way men and women respond to health messages. Men and women are more likely to practice health-related behaviors that coincide with their expectations for their gender.

The survey asked men and women questions about how decisions are made around earnings and health care. Participants were also asked about their agreement with six gender norm statements. Regarding other social factors, participants responded to questions about group and club membership and community action.

8.1 Attitudes toward gender norms

Table 8.1 Attitudes toward gender norms		
Percent of men and women who agree or disagree with six statements related to gender norms		
Statement	Female	Male
<i>A woman should play a role in making decisions about the household</i>		
Strongly or somewhat agree	98.2	94.8
Strongly or somewhat disagree	1.6	5.0
Don't know	0.2	0.2
<i>It is more important for boys to get an education than girls</i>		
Strongly or somewhat agree	11.4	14.6
Strongly or somewhat disagree	88.4	85.4
Don't know	0.2	0.0
<i>A man should have the final word about decisions in his home</i>		
Strongly or somewhat agree	42.7	47.4
Strongly or somewhat disagree	57.0	52.5
Don't know	0.4	0.2
<i>A good wife obeys her husband even if she disagrees</i>		
Strongly or somewhat agree	61.3	63.2
Strongly or somewhat disagree	38.4	36.7
Don't know	0.3	0.1
<i>A woman should play a role in community decision making</i>		
Strongly or somewhat agree	96.4	96.0
Strongly or somewhat disagree	3.1	3.4
Don't know	0.6	0.6
<i>It is a woman's job mainly to take care of the home and cook for her family</i>		
Strongly or somewhat agree	50.5	45.8
Strongly or somewhat disagree	49.1	53.8
Don't know	0.6	0.4

Participants were asked about three statements related to gender norms. Three gender norms statements were overwhelmingly positive, including 98.2% of women and 94.8% of men

agreeing that women should play a role in making decisions about the household. In addition, 96.4% of women and 96.0% of men agreed that women should play a role in community decision-making. Men and women responding to the survey questions were considerably more mixed on the other three statements. For example, 42.7% of women and 47.4% of men agreed that a man should have the final word about decisions in his home, while 57.0% of women and 52.5% of men disagreed. People agreed overall that women should be educated and play a role in making decisions. However, when it came to statements regarding specific roles of men and women, participants were more split on their attitudes. This highlights that while it is generally accepted that women play an important role, there is still work to do around issues of equality between men and women in the household.

Table 8.2 Decision making within the household				
Percent of women and men married or living together reporting decision-making related to money and health				
Decision	Male	Female	All	
<i>Decides how money spouse/ partner earns will be used</i>				
Respondent	10.7	6.4	8.4	
Spouse/partner	31.0	42.6	37.1	
Both jointly	56.9	50.5	53.5	
<i>Decides how money respondent earns will be used</i>				
Respondent	39.8	38.9	39.4	
Spouse/partner	2.4	6.3	4.3	
Both jointly	56.9	49.8	53.4	
<i>Decisions about respondent's health care</i>				
Respondent	39.2	21.1	30.3	
Spouse/partner	7.0	22.8	14.7	
Both jointly	52.4	54.0	53.2	
<i>Decisions about children's health care</i>				
Respondent	25.1	12.0	18.7	
Spouse/partner	5.6	19.3	12.3	
Both jointly	60.5	59.7	60.1	

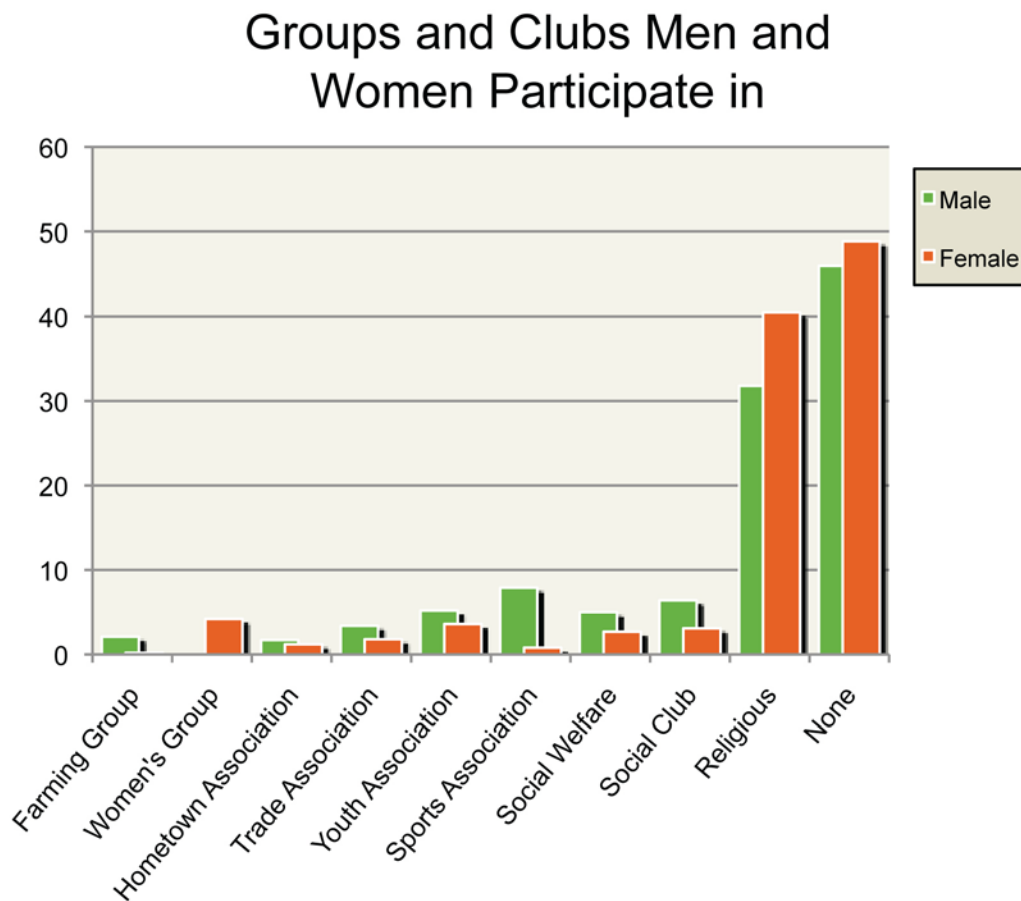
Men and women married or living with a partner responded to four questions about decision-making within their household. For all four questions, a little more than half of respondents reported that they make decisions jointly, and this was the highest regarding decisions for the health care of children (60.1% make decisions jointly). In the cases where health care decisions about children were not made jointly, both men and women were more likely to report that the decision was made by the husband or male

partner. Just under 40% of men and women reported that they decide how the money they earn will be spent. However, women were more likely than men to report that their partner/spouse would decide how the money earned by the partner spouse would be used.

8.2 Group and club membership

More people reported membership in a religious group than any other type of group, including 31.8% of men and 40.5% of women. No affiliation with a group or association was reported by 46.0% of men and 48.9% of women.

Figure 8.1 Percentage of men and women reporting participation in groups and clubs



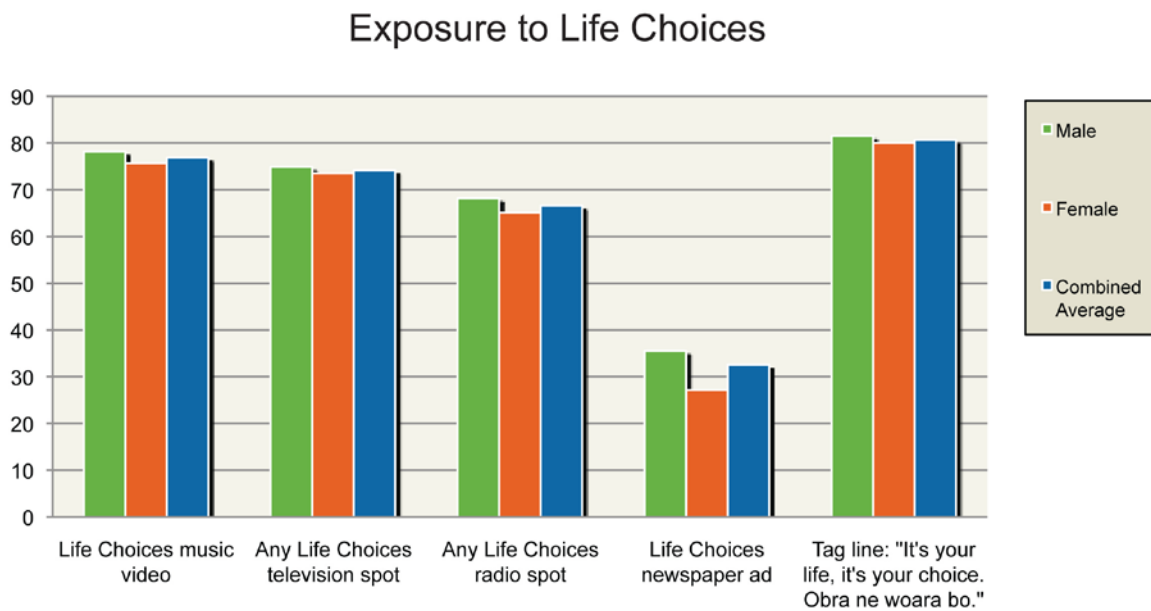
8.3 Community action

Most people (70.2%) said that community-based volunteers are important or very important to community action. However, 20.4% said they did not know how important these volunteers are to community action. Likewise, 65.2% said that NGOs are important or very important to community action, while 26.4% did not know how important they are.

9.0 Exposure to Life Choices Campaign

Data was collected a few months after the debut of the Life Choices campaign in 2010. Within that short time, 80.7% of men and women surveyed recognized the tag line “It’s your life, it’s your choice.” Additionally, 76.9% of adults surveyed had seen the Life Choices music video and 74.2% had seen at least one Life Choices television spot. 66.6% had heard a radio spot. 66.6% had heard a radio spot. 66.6% had heard a radio spot.

Figure 9.1 Percentage of men and women exposed to Life Choices campaign



10.0 Conclusions

The results of the Ghana BCS baseline survey highlight numerous areas where there is need for stronger social and behavior change communication programming. Among them:

Family planning: With modern contraception use at 26.7% for men and 21.9% for women and the reported use of the rhythm method (25.5%) higher than reported use of any modern method, there is a need for communication and social mobilization to encourage use of modern contraception. Additionally, fear of side effects was the most commonly reported reason (33.2%) for women who desired to space or limit childbearing not to be using contraception. There is still work to be done around clarifying messages and dispelling fear of side effects. Finally, 22.4% of men and women married or living together who wished to use a contraceptive method in the future were unsure of which method to use in the future, providing another important focal point for communication around available methods.

Maternal health: Though the proportion of the population attending four or more ANC visits was high at 87.1%, 28.1% of women still delivered their last child at home. One in five of these women (21.0%) said the reason was because it was not necessary to deliver in a health facility. Promoting delivery in health facilities remains important. Additionally, while most people could list at least one danger sign during pregnancy and delivery, about one in ten (11.1%) did not know any danger signs postpartum. It will be important to help expecting mothers and those around them recognize when they need to seek medical attention.

Infant and child health: Almost one in five men with children under five and more than one in ten women (19.3% and 11.5% respectively) did not know any danger signs for newborns in the first 48 hours of life. Improving knowledge of danger signs could be an important factor in the fight to reduce infant mortality. Additionally, only 39.0% of children 6-23 months met the standards for all three infant and young child feeding practices, and there is particular need to educate mothers and other caretakers on how many food groups and how many daily feedings are necessary for children under the age of two.

Malaria: It is important to encourage and motivate use of the nets people have in their homes, as 47.2% of nets found in households were reported as not used the previous night. Among children under five, 30.2% of boys and 25.8% of girls had slept under an LLIN the previous night. As the most commonly cited reason for children not sleeping under nets is that they were too hot (32.2%), there is a need for communication programming to combat issues of comfort that remain barriers to net use. There is additional work to be done around misconceptions of causes for malaria, such as eating dirty food and drinking dirty water. Eliminating these beliefs and solidifying the idea that mosquitoes transmit malaria may encourage net use.

Water, sanitation and hygiene: Improper storage of water means that the water that may have been clean coming out of a tap or from another source can be contaminated by a dirty container exposed to unclean hands reaching in for water. Reaching in for water remains a

constant risk for contamination. Knowledge of proper storage for drinking water is an important tool for people to keep their water clean and stay healthy. Additionally, progress needs to be made towards people washing their hands with soap at critical times, including after coming from the toilet and before eating.

Gender norms: While people agreed overall that women should be educated and play a role in making decisions, the fact that many people still did not consider the role and power of women equal to men shows that there is still work to be done around creating equitable gender norms in Ghanaian society.

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