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SEXUAL AND REPRODUCTIVE HEALTH IN ACCRA, GHANA

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SUMMARY

Objective: To describe sexual and reproductive health among women in Accra and explore the burden of sexual and reproductive ill health among this urban population.

Design: Cross-sectional study.

Methods: We analysed data from the WHSA-II (n=2814), a cross-sectional household survey on women's health, and supplemental data from an in-depth survey (n=400), focus groups discussions (n=22) and in-depth interviews (n=20) conducted among a subsample of women which focused specifically on reproductive health issues.

Results: Modern contraceptive use was uncommon. More than one third of women reported ever using abstinence; condoms, injectables and the pill were the most commonly reported modern methods ever used. The total fertility rate among this sample of women was just 2.5 births. We found a considerable burden of sexual and reproductive ill health; one in ten women reported menstrual irregularities and almost one quarter of women reported symptoms of a Sexually Transmitted Infection (STI) or Reproductive Tract Infection (RTI) in the past 6 months. Focus group results and in-depth interviews reveal misperceptions about contraception side-effects and a lack of information.

Conclusion: In urban Ghana, modern contraceptive use is low and a significant proportion of women experience reproductive ill health (defined here as menstrual irregularity or RTI, UTI, STI symptoms). Increased access to information, products and services about for preventive care and contraception could improve reproductive health. More research on healthy sexuality and the impact of reproductive ill health on sexual experience is needed.

Keywords: Sexual and reproductive health, fertility, contraception, abortion, sexually transmitted infections, Accra

INTRODUCTION

The concept of reproductive health is almost twenty years old.[1] The International Conference on Population and Development (ICPD) in 1994 marked the birth of this concept, defining reproductive health as "a state of complete physical mental and social well-being and not merely the absence of disease or infirmity in all matters related to the reproductive tract, its functions and processes."[1] Reproductive health is closely linked to Millennium Development Goals 1 to 6 and is a very important marker of the development status of any nation. Sexual health was originally defined as one of the components of reproductive health but over time the concept of reproductive health has come to be known as sexual and reproductive health. Sexual and reproductive health (SRH) covers issues such as education, gender, poverty and mobility in addition to the original components of reproductive health.[2]

Programmes and policies designed to improve SRH have for some time been a feature of many countries' health interventions. There remain, however, very few comprehensive evaluations of women's SRH anywhere and even fewer in Africa. The task of measuring SRH is complex since many health conditions are indirectly linked to sex and reproduction and can be exacerbated by the stress of pregnancy or a sexually transmitted infection. Several attempts to measure the burden of premature death and morbidity associated with reproduction and sexual activity using synthetic measures such as the disability-adjusted life years (DALYs)[3] have been heavily criticized by both feminists and epidemiologists alike since the basis for using DALYs in SRH remains very slim and the calculation methods appear particularly inappropriate for the assessment of reproductive health.[4,5]

Sexual and Reproductive Health programmes are a central feature of the Ministry of Health's programme of Work in Ghana. The Demographic and Health Surveys serve as the main means by which SRH in Ghana is measured.

In this analysis we provide data on some of the core components of sexual and reproductive health among women in Accra, Ghana, including contraceptive use, fertility, sexually transmitted infections and safe motherhood. Our overall aim is to describe sexual and reproductive health among women in Accra, using both quantitative and qualitative data, and explore the burden of sexual and reproductive ill health among this urban population.

MATERIALS AND METHODS

For this analysis we present data on contraceptive use and fertility from the Women's Health Study of Accra II (WHSA-II) survey conducted in 2008-9. The overall study methods are described elsewhere (Darko et al this supplement). We supplement the information from the full WHSA-II sample with data from the Focused Investigations in Reproductive Health (FIRH) substudy which included four components – one quantitative (A) and three qualitative (B-D) (Figure 1). The first component, a survey of 400 women who participated both in the WHSA Waves I (2003) and II (2008-9) as well as the Time Use and Health Survey (TUHS) (2008-9), collected data on use and cost of a range of reproductive health products and services, as well as the woman's experiences with her most recent delivery. In the second component, focus group discussions (FGDs) were conducted with women to document community norms and knowledge regarding contraception and abortion. The third component comprised in-depth interviews (IDIs) exploring experiences of abortion among women who reported having had an abortion in the WHSA-II survey. Finally, the fourth component included IDIs with women who reported giving birth in the last five years to explore experiences of labour and delivery. Women were eligible for the FIRH quantitative survey if they had completed WHSA-I, WHSA-II and the TUHS interviews; were under 65 years of age; and spoke one of the three study languages (Ga, Twi or Ewe). Women were selected for participation in FIRH qualitative data collection activities from the broad group of 2814 women who completed the WHSA-II. Women were purposively selected based on age, socio-economic status or geographic location. For the FGDs, women were eligible if they were between 23-39 years of age in 2008. For the IDIs focusing on abortion, women were selected if they reported having an induced abortion in either WHSA-I or WHSA-II. Finally, for the IDIs on prior labour and delivery, women were selected if they reported a delivery within the year prior to their WHSA-II interview. The analysis in this paper draws from the WHSA-II and FIRH.

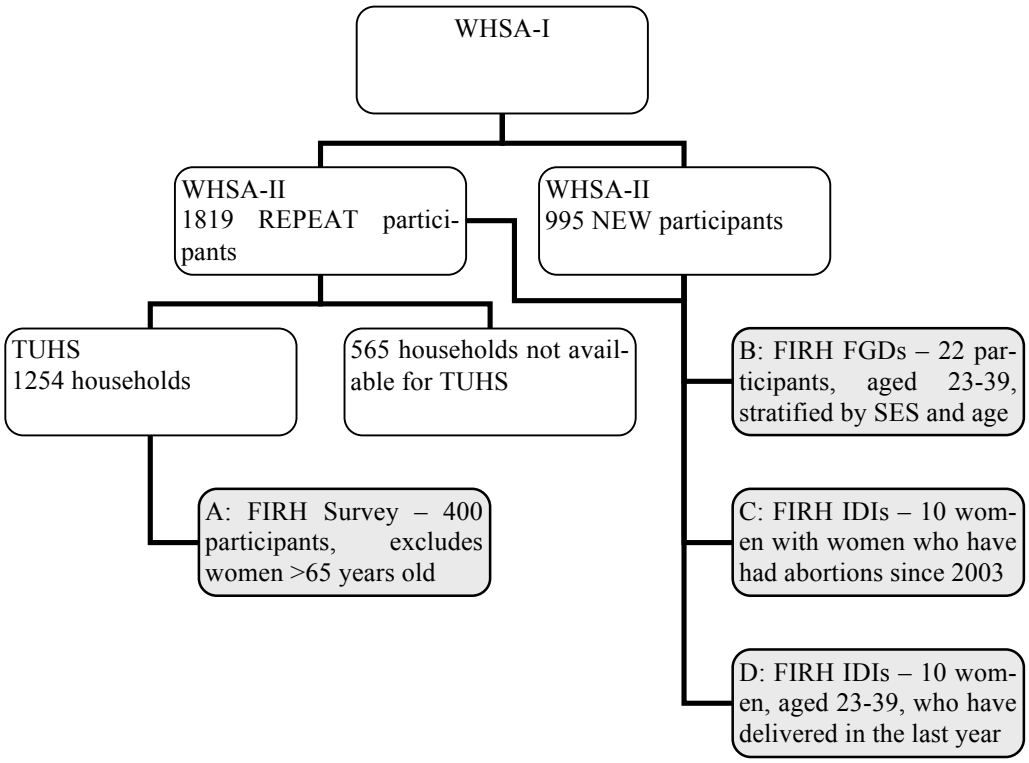

Figure 1 Linkages between the different studies

RESULTS

Basic demographic data for the 400 women who completed the FIRH survey are provided in Table 1. The median age for the FIRH participants was 39.0 years, and the median monthly household income was GH¢67.50. Most (60.2%) were married and lived in a compound dwelling (73.9%). Almost half of the women (49.9%) reported that middle school was the highest level of education completed and that they could read and write easily (46.3%). In addition the majority were Ga (57.9%) or Twi/Fanti (24.9%). The majority (64.8%) indicated that they were self-employed. The self-employed women were mostly in informal employment such as trading or selling goods in local markets or on the street.

Table 1 Some FIRH demographic characteristics (n=400)

Characteristic	**Median**	**IQ Range**
Age*	39	30-51
Years of residence in Accra†	33	25-45
Median monthly income (GHC)** (for non-retired, employed individuals only) ‡	67.50	40.00-123.70
	N	**%**
Marital statusʃ		
Currently married	227	60.2
Living with man/woman	3	0.8
Widowed	26	6.9
Divorced	30	8
Separated	26	6.9
Never married	65	17.2
Type of dwelling* **		
Separate house	53	14.1
Semi-detached	30	8
Flat	14	3.7
Compound house	278	73.9
Tent	1	0.3
Highest level of education completed††		
None	49	13.1
Primary	42	11.3
Middle/JSS	186	49.9
Secondary/SSS	68	18.2
Higher	28	7.5
**Literacy (ability to read/write) ** **		
Not at all	91	24.2
With difficulty	111	29.5
Easily	174	46.3

*Valid percent, missing 22 cases; † Valid percent, missing 30 cases; ‡ Missing 37 cases; ʃ Valid percent, missing 23 cases; *** Valid percent, missing 24 cases; †† Valid percent, missing 27 cases, ** 1US$= GHC1.20

For the 2814 women interviewed in the WHSA-II survey, the mean age was 46.2 years and almost half of them (49.3%) were married at the time of the survey. Regarding employment, 1450 (51.5%) were self-employed. While 1175 (41.8%) reported that they could read easily, 584 (21.4%) had never been to school.

Contraceptive use and fertility

In Table 2, we provide data on contraceptive use among non-menopausal women in the WHSA-II sample (only non-menopausal women were asked about contraceptive use). Ever and current use of modern methods was higher among younger women and also among women of higher wealth.

Table 2 Modern Contraceptive use for non-menopausal women (n=1686)

	Ever used method			**Currently using method**		
	Yes (%)	No (%)	DK (%)	Yes (%)	No (%)	DK (%)
Age group						
20-24	52.2	47.0	0.8	39.3	60.7	0.0
25-29	48.1	51.7	0.2	34.9	64.8	0.3
30-34	44.9	54.8	0.3	30.6	69.4	0.0
35-39	54.1	45.5	0.3	29.5	70.1	0.5
40-44	47.7	51.9	0.5	24.7	73.9	1.4
45-49	44.4	55.6	0.0	16.0	84.0	0.0
50-54	40.0	60.0	0.0	10.0	90.0	0.0
Wealth quintile						
Lowest	44.36	55.64	0.00	30.56	69.44	0.00
Second	50.29	49.43	0.29	31.71	67.89	0.41
Middle	45.40	54.60	0.00	22.22	76.89	0.89
Fourth	49.39	50.30	0.30	33.19	66.81	0.00
Highest	52.67	46.18	1.15	34.36	65.03	0.61
Total	48.41	51.26	0.32	30.22	69.40	0.38

More details of the types of contraceptives being used by women are provided in Table 3. Methods used by less than 2% of the sample (implants and RU486) have been suppressed in this table.

More than a third of the women reported having used abstinence as a method of contraception while a quarter of the women used it as a current method of contraception. Among the modern methods ever used, the male condom was most popular, followed by the injectable and the pill (19.4%, 14.0% and 13.0% respectively). The same methods were the most prevalent for current use, but the level of use was much lower (14.1%, 6.1% and 3.3% respectively), especially for the pill. Male sterilisation was not mentioned as ever-used or current method, and no woman reported female sterilisation or the diaphragm as a current method.

Turning to the women interviewed in greater depth about reproduction in the FIRH survey, Table 4 shows information on contraceptive use and non-use for non-menopausal respondents. Just 28% of all respondents reported current use of a contraceptive method or "doing anything else" to prevent pregnancy. Of those women reporting current use, periodic abstinence, or the "rhythm method", was the most common method at 39%. Injectables and the oral pill were the next most popular methods at roughly 19% and 13% respectively. More than a third of women attempting to prevent pregnancy (38.5%) reported currently using abstinence or the rhythm or calendar method. The next most popular methods were the injection (19.2%), the pill (12.8%), and male or female condoms (10.3%).

Table 3 Type of contraceptive being used at time of survey by age and wealth quintile.

	Modern					Traditional		
	Pill (%)	IUD (%)	Injection (%)	Male Condom (%)	Female Condom (%)	Abstinence (%)	Withdrawal (%)	Breastfeeding (%)
Age group								
20-24	2.3	0.0	4.6	26.4	1.2	29.9	17.2	2.3
25-29	1.6	0.7	5.9	22.7	0.7	29.6	20.1	2.0
30-34	4.7	3.0	7.7	12.8	1.3	20.5	10.7	3.0
35-39	5.3	3.8	7.7	9.6	0.0	21.1	9.6	1.0
40-44	4.8	4.1	6.2	5.5	0.0	16.6	7.6	0.0
45-49	0.0	2.5	2.5	5.1	0.0	13.9	6.3	0.0
50-54	0.0	0.0	0.0	4.8	0.0	23.8	4.8	0.0
Wealth quintile								
Lowest	5.6	1.5	7.1	11.7	0.5	21.3	8.1	2.0
Second	3.9	1.9	8.1	11.6	0.4	20.1	15.1	0.8
Middle	1.3	0.9	4.7	12.8	0.0	23.5	14.5	3.0
Fourth	2.5	3.3	5.7	17.1	0.8	20.8	12.2	1.2
Highest	3.6	4.2	4.2	17.9	1.2	28.6	11.3	0.6
Total	3.3	2.3	6.1	14.1	0.5	22.5	12.5	1.5

Table 4 FIRH contraceptive use/non-use among non-menopausal women (n=279)

	n	%
Currently using a method or "doing anything else" to prevent pregnancy: (Mark all that apply)	78	28.0
Pill	10	12.8
IUD/Loop	4	5.1
Injection	15	19.2
Implant	4	5.1
Spermicide	1	1.3
Condom (male)	6	7.7
Condom (female)	2	2.6
Tubal ligation	2	2.6
Herbs/tea/prayer	2	2.6
Periodic abstinence/rhythm method/calendar method	30	38.5
Withdrawal	5	6.4

Of the 201 non-menopausal women who reported they were not currently using a contraceptive method, 42% indicated that this decision was because they did not currently have a partner or were not sexually active, and nearly 20% said that they currently desired a pregnancy. Roughly one in ten (11.4%) indicated that they were not attempting to prevent pregnancy because of fear or dislike of contraceptive side effects. Religious reasons were not a factor in determining non-use (Table 5).

Table 5 Reasons for contraceptive non-use among non-menopausal women (n=279) in FIRH study

	n	%
Reason for not currently using a method or "doing anything else" to prevent pregnancy	201	72.0
Not sexually active/no partner	85	42.3
In or post menopause*	5	2.5
Hysterectomy	6	3.0
Desire for pregnancy	40	19.9
Currently pregnant or breastfeeding	8	4.0
High cost/lack of household income	1	0.5
Lack of time	2	1.0
Religion prohibits/religious reasons	1	0.5
Dislike/fear of side effects	23	11.4
Other	14	7.0
Don't know/refused	27	13.4

*These women indicated that they were not in menopause when asked the question directly; however they later offered menopause as reason for not taking contraceptives.

Nineteen women participated in three FIRH FGDs about family size and contraception use.

We aimed to recruit women for four FGDs broken down by age and socioeconomic status (SES) (i.e.

young age low SES, young age high SES, older age low SES, older age high SES).

It proved very difficult to recruit women for the "older and higher SES" group as there were less of these women to sample from. Most women in this category were formally employed and could not spare time for the interview, despite offering to conduct the interview on a Saturday. The final participation rate per FGD was as follows: younger and lower SES (n=6), younger and higher SES (n=3), older and lower SES (n=10), older and higher SES (n=not completed).

The FGD respondents were knowledgeable regarding 'modern' methods of contraception and reported that information is generally available from advertisements on TV and radio and from friends and clinic staff. However, the FGD respondents also expressed several misconceptions about the side effects from using 'modern' methods and that these misconceptions result in many women turning to 'traditional' methods of contraception. The most common traditional methods referred to were periodic abstinence, withdrawal, and the calendar method. Abortion was also mentioned in the context of 'traditional' methods of contraception as a way to prevent pregnancy.

One salient feature of this population is the very low level of current fertility and the sharp fall in fertility in the years before the interviews in 2009 (Table 6).

Table 6 Age-specific fertility rates for the period before the survey by age at survey

	Years before interview							
	< 5 years	**6 - 10 years**	**11 - 15 years**	**16 - 20 years**	**21 - 25 years**	**26 - 30 years**	**31 - 35 years**	**36 – 40 years**
Age group								
20-24	0.065	0.061	0.063	0.092	0.106	0.126	0.165	0.113
25-29	0.110	0.124	0.135	0.151	0.199	0.206	0.146	0.235
30-34	0.141	0.142	0.138	0.177	0.198	0.214	0.227	0.241
35-39	0.122	0.117	0.115	0.118	0.162	0.181	0.242	0.227
40-44	0.056	0.066	0.052	0.090	0.107	0.113	0.173	0.172
45-49	0.020	0.016	0.026	0.026	0.045	0.097	0.084	0.127
TFR	2.57	2.63	2.65	3.27	4.09	4.69	5.19	5.57

Reproductive health outcomes

Table 7 provides information regarding the prevalence of a specific set of reproductive ill health indicators in the FIRH survey population.

Table 7 Reproductive ill-health (n=400)

	n	**%**
Reported currently having menstrual irregularity	47	11.8
Reported any RTI/STI/UTI symptom in the past 6 months	91	22.8
Abnormal discharge in the past 6 months	72	18.0
Abnormal smell*	43	60.6
Abnormal colour*	65	91.5
Abnormal volume*	35	49.3
Pain on intercourse in the past 6 months	21	5.3
Pain on urination in the past 6 months	13	3.3

* Missing one case

One in ten women reported current menstrual irregularity, and nearly one quarter (23%) reported experiencing symptoms of either a reproductive tract infection (RTI), sexually transmitted infection (STI) or urinary tract infection (UTI) in the past six months.

We also asked respondents about seeking preventative care and fertility treatments in the past six months. Just 7% (n=28) of respondents reported obtaining any kind of preventative reproductive health care in the past six months. Of those who did obtain preventative care, breast exams (46%), nutrition education (29%) and HIV tests (25%) were the most commonly obtained services. Six women also obtained fertility treatments.

FIRH Labour and Delivery In-Depth Interviews

According to the FIRH survey, 38 women had a delivery in the last two years, and all received prenatal care. Of those, several received additional services around the time of the labour and delivery. Thirty-six (94.7%) obtained postnatal care/infant immuniza-

tion/prophylaxis. Nineteen women (50.0%) obtained maternal HIV counselling. Seven (18.4%) obtained services for morning sickness. In addition, six (15.8%) women obtained complicated pregnancy or delivery services that included premature/early delivery. Of the four women who specified the type of complication, all women had complicated deliveries: one woman had a breech delivery, one woman had a complicated delivery service (premature), one woman had a complicated delivery service (late delivery), and one woman specified a complicated delivery. These results are summarized in the following table.

Table 8 Summary of services obtained by women with deliveries in the past 6 months

Service	Number of women (%)
Antenatal care	38 (100%)
Labour and delivery services	36 (97.4%)
Postnatal care/infant immunization/prophylaxis	36 (97.4%)
Maternal HIV counselling	19 (50.0%)
Services for morning sickness	7 (18.4%)
Complicated pregnancy/delivery services	6 (15.8%)

According to data obtained in the WHSA-II, 36.8% of the 38 women belonged to the National Health Insurance Scheme (NHIS). Only two delivered outside of health facilities. Though this sample comes from the Accra Metropolitan Area, some women still reported high travel times to health facilities and significant transportation-related costs. One quarter of women travelled more than 30 minutes to a facility with one woman travelling two hours. Travel costs increased with travel time, time being a likely indicator of distance to a health facility. Transportation costs ranged from GH¢0 to GH¢25 with 85% of women paying GH¢3 or less. NHIS membership reduced hospital fees by 55%. While hospital fees for delivery should theoretically be zero if a woman is enrolled in the NHIS, only two women had no delivery-related costs. Women with health insurance paid an average of GH¢24.39 (range GH¢0 to GH¢60.50), and women without health insurance paid an average of GH¢53.80 (range GH¢0 to GH¢500). (1US$=GHC1.20 at the time of the study)

DISCUSSION

Qualitative data results from this analysis support previous findings which show that Ghanaian women have a very high level of knowledge about modern contraception.[6,7] This knowledge, however, does not translate into use of modern contraception. Modern method use was low in both the overall WHSA-II sample and in the younger FIRH cohort. Data from the FGDs show that even though women know of modern family methods, they still have inaccurate information about how these methods work and the likely side effects. More information is needed on where women get their contraception information, and whether misinformation about contraception is due to a lack of information or a lack of correct information from health workers, public information or other sources. Innovative education campaigns that provide more accurate information in engaging and user-friendly ways could help to begin dispelling misinformation about modern contraceptive methods.

A new finding from this study is the reported high level of use of periodic abstinence as a method of contraception. This result differs from the method mix reported by the Ghana Demographic and Health Survey.[8] Reproductive health problems were commonly reported among women in the FIRH survey with symptoms of STI being the most common problem. This finding could be linked to the low level of condom use among sexually active women and their partners. Previous work has shown that majority of women with STI symptoms tend not to report their symptoms,[9] an action that could lead to reproductive health problems like infertility that has major social consequences in the Ghanaian society. There is a need to actively consider the development of a reproductive health surveillance system that would help in detecting these reproductive health problems early and putting interventions in place to prevent tertiary reproductive health disability.

Coverage of delivery services in Accra needs to be addressed because women living in the capital city complain of high travel times in reaching delivery services. This finding could be due to a combination of the levels of traffic on the roads and the distribution of public facilities that offer delivery services. Also the fact that pregnant women registered under the NHIS still have to pay for some services raises questions about whether the charges paid by the NHIS for delivery services cover the actual costs. Health facilities might be charging the pregnant women extra amounts in order to make up for perceived discrepancies between actual costs and the reimbursement from the NHIS for services rendered. This practice, if not addressed, could lead to some women being dissuaded from using the health services for their labour and delivery, potentially leading to a reduction in the coverage of deliveries by skilled birth attendants, which is known, in turn, to increase maternal mortality.

Despite increasing economic development and declining fertility, modern contraceptive method use remains low in Accra. Increased information about and access to the full range of contraceptive methods is critical for

reduction of STIs, general improvement in women's health and to reduce unintended pregnancy. Combining data with information on preventive reproductive health care and access to screening and treatment for STIs and RTIs could significantly improve sexual and reproductive health in Accra. This study's data is just a first step. Future research should explore sexual activity and attitudes in more depth and aim to collect data that can speak to the positive definition of sexual and reproductive health laid out at the 1994 ICPD. Contraception and reproductive ill health are only part of the picture. Information about whether women and men find their sexual lives satisfying and have the information and access to services and products to meet their family goals is a critical remaining gap.

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