

## Researchers

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# Reproductive and Overall Health Outcomes and Their Economic Consequences for Households in Accra, Ghana

The analysis indicates that there is a strong and direct connection between women's illness (and days of work missed due to children's illnesses). On the other hand, the impact of pregnancy and infant care on women's economic activity is less clear as poorer mothers work longer hours to compensate. Differentials in fertility are small overall and the total fertility rate is not much above replacement levels. Women are strongly attached to the labor market; they work slightly less during pregnancies but return to the labor market right after giving birth. In the long run, because of women's duties to their families, children appear to have a direct negative effect on labor supply. The data show an indirect negative effect through the harmful (but small) long-term effects of childbearing on women's health.

The longitudinal design allowed for the follow-up of illness episodes and the measurement of costs more accurately than retrospective surveys would. The findings indicate a median treatment cost of about \$15, equal to about four times the daily wage. The majority of treatments involve self-medication: Only 39 percent of the 1,150 health problems reported involved professional medical help, with drugs acquired at the pharmacy the most common therapy (53 percent). More work on "health maintenance" costs is underway.

Preliminary analysis of WHSA-II data demonstrates low rates of contraceptive use among sexually active women.

Approximately half of nonmenopausal women had "never used anything" or "tried in any way to delay or avoid getting pregnant" and over two-thirds reported that they were not "currently doing anything or using any method to delay or avoid getting pregnant." The most commonly reported contraceptive methods in the WHSA-II survey were male condoms and withdrawal, with 20.0 percent and 20.4 percent reporting ever-use, and 14.8 percent and 13.3 percent reporting current use, respectively. Most women (34 percent) reported ever practicing periodic abstinence and 24 percent reported currently practicing periodic abstinence, indicating that this is another common strategy to prevent or postpone pregnancy.

Forthcoming analyses for the FIRH survey will show the proportion of women experiencing reproductive health conditions or requiring reproductive-health-related products or services in the past six months. A preliminary finding from the WHSA-II related to the costs associated with reproductive health care is that 49.8 percent of all nonmenopausal women reported "usually" experiencing period pain and 14.8 percent

of all nonmenopausal women reported missing work or being unable to complete daily tasks because of their period. The cost of these products, in addition to the cost of missing work or not being able to complete daily tasks, may translate into significant economic costs to women in our study.

## Country where the research will take place

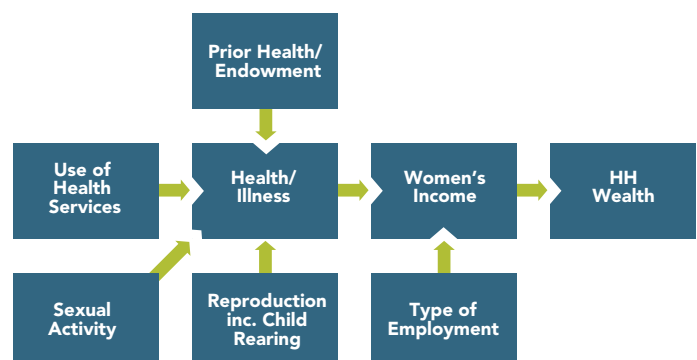
Ghana

## How does the research describe the impact of population/reproductive health on poverty reduction and/or economic growth?

The most succinct summary of the many hypotheses and analytic strategies is provided by the diagram below.

## How will the research address a policy need, and what kind of policy lesson is expected?

The studies and analyses outlined below are providing new and richer information than ever before on the interaction between sexual activity and reproduction and labor force productivity at the household level. The studies address the



challenges faced by urban women in a society where overall economic growth is fast, fertility is low, and women's economic independence is considerable. These are new combinations of circumstances that many low-income countries in the fertility transition will have to face in the near future. In addition to lessons about the promotion of the welfare of women and children, the studies show the importance of the external policy environment, in particular the failure of the family planning program to encourage widespread adoption of modern methods and the inadequacy of the national health insurance scheme.

## Methods used

The data which have been collected include a range of methods including:

- A retrospective panel survey (WHS-A-I and WHSA-II)
- A time use and health follow-up study (12 months duration)
- A supplementary retrospective survey on the costs of maternities and sexual behavior
- In-depth interviews with key informants
- Focus group discussions
- Additional qualitative information on selected key topics

These data are being analyzed using a variety of regression models. The qualitative data are being analyzed conceptually and for content.

## Data used

Wave-1 of the Women's Health Survey, the initial baseline study of 3,200 women and households conducted in 2003, has been expanded and added to cover the last eight years.

The table below summarizes what has been accomplished in terms of data collection.

## Research results

Women work long hours and for moderate wages throughout their lives.

Pregnancy and child care do not interrupt this intense work pattern, even after delivery. The majority of women work for themselves in the informal sector where young children can accompany their mothers. As seen in the graph, 80 percent of all women (including the unemployed) were working or seeking work in the 12 months after delivery. More complex multivariate analysis; controlling for age, marital status, born in the city or not, household assets and self-assessed health, show that family size does not have a strong effect on labor force participation.

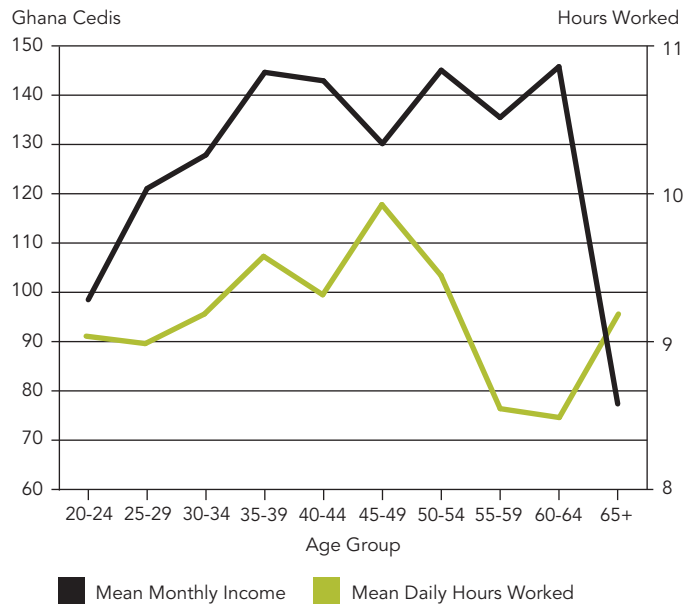
A large number of pregnancies may have negative effects on women's health (new analysis of changes between Waves 1 and 2). Larger families may support mothers, reducing the need to work. But mothers may also require continued support as demands for education and training generate a larger demand for child-care services from relatives. The data suggest that in conditions of very low fertility, the effects of family size on women's work and incomes may be reduced. These results have to be considered in the context of very low fertility, the economic independence of women (over 50 percent of households do not have any adult male contributing to the household's income), the existence of job openings (on average, adult respondents report working 55 hours per week, often divided between multiple jobs), and one in five households received remittances from

SURVEY	SPONSOR	STATUS	FIELD WORK START	FIELD WORK END	TARGET POPULATION	STUDY SAMPLE SIZE
Women's Health study of Accra Wave II (WHS-A-II)	NIH	closed for analysis	08-Oct	09-Jul	Women interviewed in WHSA-I	2,814
Verbal Autopsy Study (VA)	Harvard School of Public Health	closed for analysis	09-Jul	09-Aug	Women who have died since WHSA-I	120
Time Use and Health Study (TUHS)	Hewlett/PRB	closed for analysis	08-Dec	10-Mar	Household members living with women in WHSA-I & II sample	5,484
Focused Investigations on Reproductive Health (FIRH) *survey	Hewlett/PRB	closed for analysis	Sept/Oct-09	09-Nov	Women in TUHS	400
FIRH * Focus Group Discussions	Hewlett/PRB	data coding	09-Dec	10-Mar	Women in WHSA-II, stratified by age and SES	4
FIRH * In-depth Interviews	Sponsor	data coding	10-Jan	10-Mar	Women in WHSA-II, reported: 1.abortion 2.labor and delivery	1. 10 2. 10
Housing and Welfare Study of Accra (HAWS)	Harvard Dept of Economics	data cleaning	09-Sep	10-Mar	37 slum areas as defined by UN Habitat in 2003	2,099

abroad. The amounts received are substantial: a median of US\$42 a month.

The detailed analytical work of linking fertility patterns and reproductive health to household incomes and welfare is just beginning.

## Research products



Allan G. Hill, “Reproductive and Overall Health Outcomes and Their Economic Consequences: Some Findings From Accra,” paper presented at the ESRC/LSE meeting on reproductive morbidity and poverty, Nov. 6, 2010.

Allan G. Hill, “Reproductive and Overall Health Outcomes and Their Economic Consequences: Definitional and Measurement Issues in the Accra Women’s Health Study,” paper presented at the workshop “Using Mixed Methods to Study the Relationship between Reproductive Health and Poverty: Lessons From the Field,” London School of Hygiene and Tropical Medicine, Nov. 4-5, 2010.

WHSR Research Team, “The Women’s Health Study of Accra: Report on the Second Wave 2008-2009,” ISSER, University of Ghana, 2010.

RM Adanu, “Unsafe Abortion: Lessons From Ghana,” Keeping Our Promise Conference, Accra, Ghana, November 2010.

Shawna Horn-Marine, “Relationship Between Obesity and Depression Among Adult Women in Accra, Ghana,” SM thesis, Harvard School of Public Health, 2009.

Rachel M. Benkeser, “Prevalence of Overweight and Obesity and Perception of Healthy and Desirable Body Size in Urban, Ghanaian Women: Findings from the Women’s Health Study of Accra, Wave II,” SM thesis, Harvard School of Public Health, 2010.

Samantha Lattof, “The Influence of Enabling Resources and Predisposing Characteristics on Facility-Based Childbirth in Ghana’s Greater Accra Region,” SM thesis, Harvard School of Public Health, 2010.

Justin Stoler et al., “Distance Threshold for the Effect of Urban Agriculture on Elevated Self-Reported Malaria Prevalence in Accra, Ghana,” *Am. J. Trop. Med. Hyg.* 80, no. 4 (2009): 547–54.

Samantha Lattof, Allan G. Hill, and Richard Biritwum, “Cause of Death in Urban Africa: New Experiments With Verbal Autopsy Questionnaires in Accra, Ghana,” paper presented at the Cause of Death Session 410 (France Meslé), Population Association of America, Dallas, April 15-17, 2010.

*Ghana Medical Journal Special Supplement* (contents below)  
Working title: “Health of Accra: A Comprehensive Assessment”

1. Rudolph Darko et al., “The Health of Adult Women in Accra, Ghana: Self-Reports and Objective Assessments 2008-2009.”
2. Richard Adanu et al., “Reproductive and Sexual Health in Accra, Ghana.”
3. Richard Biritwum et al., “The Pattern of Noncommunicable Disease and Salient Risk Factors in Accra, Ghana.”
4. Isaac Osei-Akoto et al., “The Use of Health Services, Public and Private, and the Impact of the National Health Insurance Scheme.”
5. James Frimpong et al., “Malaria: Seasonal and Geographical Patterns.”
6. Amah de Graft Aikens et al., “Mental Illness and Depression.”
7. Livia Montana et al., “The Health of the Poor: Households Living in Informal Settlements.”
8. Richard Biritwum et al., “Mortality of Adults and Children by Cause and Place of Death.”