Introduction

Recent research has supplied increasing evidence that, in addition to changes in socioeconomic conditions, diffusion of ideas and values through social interaction contributes to contraceptive uptake and fertility decline. However, most of this research has focused on women’s social networks. Recent years have also seen a rising interest of demographers in men’s roles in fertility changes, especially in sub-Saharan Africa, where men exert considerable control over reproductive matters. Yet, most studies dealing with men’s role in fertility change have focused on either men’s individual characteristics or their interactions with their marital partners (“couple studies”). Our paper brings together these two bodies of literature by examining men’s interaction on reproductive matters through informal social networks and its contribution to contraceptive use by their partners in a rural district of Northern Ghana. The papers has two main objectives: first, to examine the content and frequency of reproduction- and contraception-related exchanges in men’s social networks; and second, to estimate the effect of these exchanges on the probability of modern contraceptive use by men’s marital partners.

Data and Methods

Data for this paper comes from the 1998 and 1999 panel survey of the Kassena-Nankana district of northern Ghana. The district is predominantly rural with an economy based on subsistence agriculture. For ease of the research activities of the Navrongo Health Research Centre, (NHRC) (a field station of the Ministry of Health), a zoning and a compound identification system has been
developed and a demographic surveillance system has been put in place since 1993 to monitor demographic dynamics in the district.

The Panel Survey, conducted annually since 1994, is a component of the NHRC’s Community Health and Family Planning project (CHFP) and is intended to yield adequate data for the evaluation of the impact of the CHFP on contraceptive use and other proximate determinants of fertility over time. The CHFP is a four–celled experimental design to test the impact of convenient community health and family planning services on fertility and mortality in the district. The project is implemented by mobilizing two types of resources – the usual Ministry of Health resources and community participation in program management. The four cells thus represent the different combinations of resources that are mobilized. Cell I has the community volunteers locally referred to as Yezura Zeena (YZ) only; cell II has the Community Health Officers (CHO) only; cell III has both CHO and YZ; and cell IV serves as comparison area with none of the key staff working in that area.

The core instrument of the panel survey was adopted from the core questionnaire of the 1993 Ghana Demographic and Health Survey. The instrument collects information on background characteristics, reproduction, contraception (knowledge, use and intentions), pregnancy and breastfeeding and fertility preferences. Each year special modules are attached to the core survey instrument to elicit information not routinely gathered but of interest to the NHRC. In the 1998 and 1999 panel surveys, a diffusion and social interaction module was added to the core instrument and administered to respondents in cell III and IV. The social network variables measured include discussion of childbearing and reproductive matters, perception that network partners approve of the use of modern contraception, perception that network partners have used modern contraception and have encouraged respondents to use a modern method.
This analysis thus makes use of the unique features of this data namely; longitudinal observation over time, with remarkably high sample retention and the gathering of detailed social network data for both women and men. The paper links men’s social network information obtained through the two surveys to the contraceptive behaviour of their female partners.

First, we examine the contraceptive use and reproductive behaviour of spouses of men who provided information on their personal networks in the 1998 and 1999 panel surveys. Next, we use the linked network data on men in 1998 and 1999 to explore attitudes, behaviours and characteristics that influence the contraceptive use of their partners. We use logistic regression to assess the effects of men’s discussion of reproductive and contraceptive matters with their social network partners on the likelihood of current use of a modern contraceptive method by their female partners, controlling for men’s and women’s background characteristics and women’s own social interaction on reproduction and contraception. We use men’s discussion of reproductive matters, encouragement to use a method, and perceived approval and use of modern contraception by network partners as predictors of partner’s use. The regression model also reflects cell variation in the experimental design of the CHFP. The baseline difference in odds of female partner’s contraceptive use for cell 3 relative to cell 4 is included in the model. This allows comparison across the most intensive community action cell and the control cell.

**Preliminary Results**

Preliminary results of the analysis suggest that reproduction- and contraception-related matters are frequent topics of conversations among men. Most commonly, men report positive assessment of family planning and encouragement to use modern contraception among social network partners. These exchanges appear to have a strong impact on men’s views of contraception because of the pressure for conformity that they generate. The results of the logistic regression model show that men’s exposure to reproductive and contraceptive discussions within their social networks exerts a
significant effect on their partners’ contraceptive use, even though the magnitude of these effects is smaller than that of women’s social interaction. We conduct additional analyses to enhance the causality argument and to explore the pathways through which men’s social interaction affects women’s contraceptive use.

Discussion

The results of this analysis illustrate the importance of men’s interaction within social networks for contraceptive and reproductive changes in rural sub-Saharan settings. However, they also call for additional research to fully understand these complex processes. The impact of informal interactions on contraceptive use may depend on the timing and context of these interactions, which are not well measured in our data. It is possible that the surveyed men understated the negative assessments of family planning in their exchanges with social network partners. Accounting for negative information, rumours, and misconceptions that may circulate in men’s social networks is important because they may discourage the adoption of contraception. Qualitative methods, among other research tools, may be particularly useful in capturing the dynamic nature of informal social interaction. The study’s findings have important policy implications as they suggest that men’s social networks can be utilized by family planning programs to spread and legitimize information on fertility regulation and contraceptive use.