Social Networks and Women's Reproductive Health Choices in India

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Short Abstract

While the influence of peers on economic behavior has been studied in various contexts, network analyses of gendered issues, such as reproductive health, are quite limited. Using the baseline survey of an ongoing networks-based randomized controlled trial (RCT) in rural India, we characterize the social networks of young women in the context of family planning (FP). We find that these women's FP network is very sparse and displays homophily, i.e., the peers are similar to the egos in terms of socioeconomic characteristics (e.g., education, caste). Women who have lower decision-making power relative to their husbands, are less educated, and do not work outside of their home have fewer FP peers. The results of the RCT together with the social networks characterization will enable us to disentangle peer effects from correlated observables and to understand how FP interventions are likely to diffuse through a sparsely connected network of women in India.

JEL codes: J13, J16, I15, O33

Key Words: Social Networks, Family Planning, Gender

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Extended Abstract

A growing body of work in economics examines the role of social networks in shaping individual behaviors and outcomes (Jackson et al., 2016). While the influence of peers' actions and attributes on economic behavior has been studied in various contexts, network analyses of gendered issues, such as reproductive health, are quite limited, especially in developing countries where social interactions are believed to play a critical role due to the lack of formal institutions and the presence of information frictions (Breza, 2015).

In this paper, we characterize the social networks of young women in India in the context of family planning (FP). Decisions about fertility and contraception are more private in nature and are typically considered a "woman's domain" in many countries. These FP networks may, thus, look very different from those examined in prior network literature on microfinance, agriculture, etc., and the policy implications for network-based FP interventions may be quite distinct; e.g., it is a priori unclear if spillovers from peer exposure to FP are positive or negative.

We use data from a survey that we conducted during June-August 2018 in 27 villages in Jaunpur, Uttar Pradesh. We administered this survey to 671 married women aged 18 to 30. To map their fertility-related social network, we asked each woman ("ego") to name up to 5 individuals in the study area, besides her husband and mother-in-law, with whom she converses most often, and up to 5 individuals with whom she discusses her reproductive health or FP ("alters"). Since a woman's FP decisions may also be shaped by her husband, mother-in-law, and relatives outside the study area, we also asked questions related to her interactions with them. We asked the ego to provide socioeconomic, demographic, and network-related information (e.g., measures of trust, centrality, connectedness) for each of her peers. Hence, we capture each participant's immediate social neighborhood and the network characteristics through which attitudes about fertility and FP are most likely to spread.

India provides an interesting context for our study. The patrilocality custom that requires a married woman to move into her husband's household, often in a different village from her natal home, combined with restrictions on mobility might lead to greater social isolation and fewer peers for young married women. Moreover, the higher prevalence of joint families implies that a young woman's fertility decisions may be more influenced by members of her marital household than local friends or her pre-marital social network.

Our data reveal several interesting findings. Young women in rural India are quite isolated in terms of interactions with peers about fertility and FP. In their marital villages, 36% of women have no one they speak to besides their husband and mother-in-law about FP. Moreover, 22% of women do not speak to anyone inside or outside their marital village on these issues. Conditional on having a non-zero number of peers, an average woman has just one FP peer in her village. Figure 1 clearly shows that the local FP network of these young women is very sparse and disconnected. An average woman has more FP peers outside than inside her village, most of whom are blood relatives in her natal village, further reflecting their isolation in their marital homes and villages.

<< Insert Figure 1 here>>

The local FP network displays homophily, i.e., the peers are similar to the egos in terms of socio-economic characteristics: almost always, the peers are female, have the same education, caste, and religion. Interestingly, 30% of the peers are older than the egos and 40% of them live in the same household suggesting that they are in-laws. Women's fertility is also strongly correlated with their peers' fertility, especially with the number of daughters.

To explore the underlying mechanisms, we examine how a woman's number of social connections varies with measures of empowerment. We find that women who have lower decision-making power relative to their husbands, are less educated, and do not work outside of their home have fewer FP peers.

The survey used in this study is the baseline wave of an ongoing networks-based RCT scheduled to end in June 2019. The RCT seeks to evaluate if enabling women to recruit female peers to accompany them to receive FP services increases their FP uptake. We will combine the results of this RCT with the social networks characterization discussed above to (a) disentangle peer effects from correlated observables and (b) to understand how a FP intervention is likely to diffuse through a sparsely connected network of rural women of reproductive age in India. The findings of this paper will thus contribute to a better understanding of the role of social networks in health preventive/promotion behaviors and health technology adoption among young women in developing countries.

References:

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Breza 2016 "Field Experiments, Social Networks, and Development,**"** *Oxford Handbook on the Economics of Networks*, eds. Yann Bramoulle, Andrea Galeotti, and Brian Rogers.

Figure 1: Family planning network of 18-30-year-old women in rural Jaunpur