

Role of Key Influencers in shaping FP decisions and choices of young women in Uttar Pradesh and Bihar: A social network study

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INTRODUCTION

Uttar Pradesh and Bihar with over 300 million population are priority states for the family planning program in India. According to NFHS-4, demand for family planning is less than 40 percent among young married women (15-24yrs) in Bihar and less than 20 percent of those demands are met by the modern contraceptives (IIPS and ICF, 2017). Similarly, in UP demand for family planning is less than 50 percent among young women and less than 30 percent is met by the modern methods. While NFHS-5 (2019-20) showed significant increase in contraceptive uptake in Bihar, young women continue to experience low demand and lower met-need (IIPS, 2020).

Contraceptive choice and fertility dynamics are complex phenomenon that highlight the social embeddedness of human actions (Granovetter MS, 1985). The intention to have a child, the value attributed to children, the norms regulating appropriate parenthood, the support available to parents, and all of the other elements involved in childbearing decision-making are created, diffused, and transformed by social interaction (Rossier C. and Bernardi L., 2009). Further, the size, composition and density of social networks have shown to play a role in contraceptive use (Kohler et al, 2001) by enabling rapid dissemination of new information that facilitates behavior change or by strongly reinforcing anti-contraceptive norms (Henrich J. and Boyd R., 1998). Integrating individual or network characteristics with community-level social norms and other characteristics may help capture wider social influences. To expand the evidence for what works to create demand for FP among the young (under 25yrs) and low parity (0,1) women (YLPW), we are conducting a study. This study intends:

- 1) To *identify* the individual, collective, and social relationships and networks that enable or constrain young couples' contraceptive decision-making.
- 2) To discern the *processes* of how individual, family and community networks intersect and create, support, accelerate, alter or constrain and impede the pathways towards family planning and modern contraceptive use.
- 3) To understand the nature, timing and issues over which influencers exert positive or negative reinforcement, and concordance (across woman and her eco-system) in the expectations around fertility and family planning.
- 4) To inform how FP programming can increase modern contraceptive uptake in Bihar and UP with a special focus on developing novel social network interventions.

The study explores following research questions:

- Who are the primary people in the social network of YLPW (ego) and who comprises the subsequent web of relationships (alters and alters of the primary alters)?
- Who are the key influencers (KIs)? What are the features/characteristics of a critical influencer?
- What are the social mechanisms through which they influence young and low parity women?
- On what family planning issues (intention, fertility preference, method choice, method-specific information, decisions, contraceptive use) influencers have influence on?

- What are the social norms and social mechanisms and how do they interact to create demand for or barriers to using of modern contraceptive methods?
- What are the potential platforms and approaches to engage KIs to address barriers to demand and use among YLPWC?

Methods

This study includes review of literature from Low- and Middle-Income Countries with focus on India followed by primary research using egocentric social network (ECN) method in UP and Bihar. ECN is part of a broader social network analysis methodology that emphasizes the importance of relationship structure as a way of characterizing the social environment. These patterns of relationships between individuals influence outcomes such as family planning decisions among members just as outcomes among members are influenced by their position within the larger network structure (Borgatti et al, 2009). Egocentric networks are comprised of a focal actor (**ego**) as well as other actors (**alters**) connected to the ego through one or more relations (Hawe et al, 2004). In ego network design, data on the ties between ego and alters as well as between alters (alter-alter relationship) are documented both from the ego's and alters' perspective. Our study will examine a YLPW (ego) and the main relationships that surround that person (alters) and relationships of alters with their own identified alters (alters' alters) using quantitative and qualitative data.

For ECN, the proposed sample size is 200 YLPW (ego) and their 600 alters. In addition, 400 alters of alter (husband) will be interviewed using structured data collection tool. Sample will be equally distributed four districts with high and low intensity program implementation, identified by the Technical Support Unit of the states. To bring nuances of relationships and influences, in-depth interviews will be conducted with 30 women and their alters (2-3 alters per woman).

So far, we have completed literature review. A total of 50 articles from PubMed and gray literature identified for the review. Out of these, 16 are from India, 13 from Africa and 21 from other geographies. However, the data collection for the ECN study was halted due to COVID and will resume as situation normalize after the second wave of covid. We expect to complete quantitative data collection and analysis prior to the conference. Qualitative data collection and analysis may take longer. We will present quantitative findings from ECN study in the conference. Data collection post 2nd wave will also enable us to capture changes, if any, in the social network and their influence on FP during COVID.

Results

The conceptual underpinnings of the literature review are adapted from the Berkman's conceptual model - Impact of Social Networks on Health. This framework forms the basis of the synthesis and analysis. The framework positions social networks within larger social and cultural contexts, comprising social norms, political and economic influences as well as processes of social change (Berkman et al. 2000). Further, it has identified five social mechanisms, namely, social support, social influence, social learning, engagements and access to resources, through which social network influences health behavior (FP behavior in this case).

Existing evidence identifies few individuals from women's social network, such as husband, family members (matrimonial and natal), particularly mother-in-law, friends/peers and community health workers, who exercise influence shaping their family planning decisions and choices. It also highlighted that young women are not a homogeneous group. Their social network varies according to their socio-economic and normative context. The impact exercised by each influencer on contraceptive decisions of young women is shaped by the socio-economic

characteristics (level of education, family income, caste identity, family structure, gender and fertility norms) of the women and their influencers.

Husbands and mothers-in-law play a key role in influencing contraceptive choices among young women. Evidence suggests that husbands' attitude and perception on contraceptives determine if women gain access to/ and use FP methods, more so for young low parity women, particularly in the context where inequitable gender norms give men more privileges and power over their wives. Further, evidence suggests that men consolidate power if their preferences and choices aligned with MIL and other family members. However, in case of discordance between husband and mother-in-law, but concordance between woman and husband, the couple is more likely to negotiate their choices.

Restrictions on women's mobility (particularly younger/newly married women) often limit their social network to family members. However, young women who are in nuclear family or employed usually have larger heterogenous network consisting of peers, friends, neighbors, colleague and others who can directly or/and connect women to other social network or health system to acquire necessary information and services.

Evidence also highlights role of community health workers in making information and services (in)accessible to young women, which contribute to shaping their choices and decisions on family planning. In India, literature suggest that health workers coming from the same community imbibe prevailing norms on gender and fertility, and often approach young women for family planning only after first birth.

Implication

Overall, existing literature has highlighted role of some of the critical people in influencing contraceptive choices and decisions of young women. It has also emphasized need to examine socio-economic and normative context in which these influencers operate to build comprehensive understanding of their role. In terms of social mechanisms, most of the studies have looked at social learning and social influence with little attention to other mechanisms. The ECN study, informed by the literature review, aims to expand and integrate the mix of social structures and mechanisms that can build better understanding of multilayered complexity of social relationships in contraceptive decision-making. Further, it will help unpacking factors encouraging influencers to think and behave in certain ways and pressures of young women to adhere to those influences. The insights gained from this study will inform strategies and approaches to engage key influencers and pivot their influence to address barriers to contraceptive demand and use among young women in UP and Bihar.

References

International Institute of Population Sciences (2020). National Family Health Survey (NFHS-5), India, 2019-20: Bihar Factsheet. Mumbai:IIPS

International Institute for Population Sciences (IIPS) and ICF (2017). National Family Health Survey (NFHS-4), India, 2015-16: Uttar Pradesh. Mumbai: IIPS.

Granovetter MS. (1985) Economic Action and Social Structure: the Problem of Embeddedness. *American Journal of Sociology* 91(3): 481–510. [doi:10.1086/228311](https://doi.org/10.1086/228311).

Rossier C. & Bernardi L. (2009). Social interaction effects on fertility: Intentions and behaviors. *European Journal of Population* 25(4): 467–485. [doi:10.1007/s10680-009-9203-0](https://doi.org/10.1007/s10680-009-9203-0).

Kohler H-P, Behrman JR, Watkins SC. (2001) The density of social networks and fertility decisions: evidence from south Nyanza District, Kenya. *Demography* 38, 43 – 58. (doi:10.1353/dem.2001.0005)

Henrich J, & Boyd R. (1998) The evolution of conformist transmission and the emergence of between-group differences. *Evol. Hum. Behav.* 19, 215 – 241. (doi:10.1016/S1090-5138(98)00018-X)

Borgatti SP, Mehra A, Brass D J & Labianca G. (2009) Network analysis in the social sciences. *Science*, 323, 892–895. <http://dx.doi.org/10.1126/science.1165821>

Hawe P, Webster C, and Shiell A. (2004) A glossary of terms for navigating the field of social network analysis. *J Epidemiol Community Health.* 58(12):971–5.

Lisa F. Berkmana, Thomas Glassb, Ian Brissette, Teresa E. Seeman (2000). From social integration to health: Durkheim in the new millennium. *Social Science & Medicine* 51: 843-857.