



Assessing Social Capital among Pregnant Women in Firozabad, Uttar Pradesh: A Cross-Sectional Study

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Abstract: Social capital, a growing field in social sciences. Social capital comprises social networks, social trust, and social resources, with the latter developing in trust-characterized social networks or structures. The concept is novel in epidemiology and health research, linking networks and norms of reciprocity and trust to individual wellbeing. Understanding social capital is crucial for policy interventions, especially in culturally diverse countries like India.

This exploratory cross-sectional study, conducted in the urban slums of Firozabad city, Uttar Pradesh, aimed to assess the social capital of pregnant women. The objectives were to analyse the characteristics of these women and evaluate their social capital by examining their social networks, membership in social institutions, trust in others, and accessibility to social resources.

The mean age of pregnant women in the sample is 25.13 years. A significant portion of the sample are housewives (35.81%) or engaged in domestic work (29.71%). They are a member of any social, cultural, religious, business, or professional group, only a small minority (8.49%) of respondents confirmed their membership in these types of groups. The majority of pregnant women express a level of trust in people, with 13.8% explicitly stating that people can be trusted. Each woman is directly connected to approximately two other people for discussing personal matters related to diet and pregnancy and health in her network. The type of relationship (family, friend, acquaintance, etc.) can influence the type of resource accessed.

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Respondents are most familiar with the occupation of Daily Labourer. Respondents have a family-like relationship with these individuals.

This research provides valuable insights into the demographics and lifestyle of pregnant women in Firozabad, Uttar Pradesh. It highlights the importance of diverse social networks in accessing resources, suggesting the need for interventions to nurture these networks. The findings contribute to enhancing maternal health outcomes and fostering community resilience.

Keywords: Social Capital, Pregnant women, Urban Slums

Introduction

Social capital is a growing field in the theory and research of the social sciences. It also contributes to the applied research for determining the health-related behaviors. Three separate theoretical models (those of Pierre Bourdieu, James Coleman, Robert Putnam, and Lin) portray current work in social capital and Social capital is defined in different ways by each of these models, different implications for health behavior research are reflected by each of them.

Firstly, **Pierre Bourdieu** introduced the social capital's concept systematically. According to definition by Bourdieu's, social capital has two parts: I) social relationship, use the resources between the individual and other members, and II) the quality and amount of those resources. Social capital has three different types of resources. These are applicable in a variety of situations: (a) social control, (b) support of family, and (c) benefits of other than family networks (Porte's, 1998). **James Coleman** referred social capital like "not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure". In addition, as per Robert Putnam social capital is "features of social organization, such as trust, norms and networks, that can improve the efficacy of society by facilitating coordinated actions" (Murayama et al., 2012). **Lin** proposed two different concepts of social capital, first, an actor (a community or group and individual) may access and/or use of the quality and quantity of resources and second, position of an actor in social network (Rostila, 2011).

Social capital consists of three components – **social networks, social trust and social resources**. Nevertheless, the first two components are considered prerequisites for the creation of the second (social resources). Thus, social capital includes social

resources that develop in available social networks or social structures characterized by mutual trust. These social resources, in turn, facilitate access to a variety of instrumental and expressive returns that can benefit both the individual and the collective. The more high-quality social resources an individual can acquire through their networks, the better individual social capital they have. At the collective level, social capital can be thought of as the number and quality of resources created in a social structure through the coordinated actions of individuals within that structure. However, negative externalities arise mainly when social networks or social structures are characterized by high closedness, which, for example, prevents the availability of social capital for individuals in neighboring networks or structures (Rostila, 2011).

The concept of social capital is appealing and novel in epidemiology and health research (Hyypä, 2010). "How is social capital in the "lean and mean" meaning that we define here networks and norms of reciprocity and trust connected to individual wellbeing" wrote Helliwell and Putnam a few years ago and they continued "People who have close friends and confidants, friendly neighbors and supportive co-workers are less likely to experience sadness, loneliness, low self-esteem and problems with eating and sleeping" (Hyypä, 2010).

All the human beings are embedded in certain societal norms. Social relationship that link individuals to others may be formal or informal. Understanding the social capital of pregnant women is very important for any policy level intervention, especially for the country like India, which is a country with diverse cultural and social norms, for any clinical or public health intervention program.

Methodology

As India is a very diverse country, it is important to understand social capital of the community for any public health intervention program. The human development profile reveals that social network, count of membership in formal organizations and an individual or subjective index of confidence in institutions have strong geographical patterning across India (Desai et al., 2010). The study was conducted in the urban slums providing insights into the dynamics and nature of changes in social capital across different social contexts. The research paper helped understand the current status of social capital in the study population. This research paper aims to assess the social capital of pregnant women with the following objectives.

Objective

1. To analyse the characteristics of pregnant women who is residing in the urban slums areas.
2. To assess the social capital of pregnant women by examining their social networks within and outside the family, membership in various social institutions, trust in others, and accessibility and availability of social resources.

Study Design

This study was an exploratory cross sectional in nature.

Study Area

The conducted study took place in the urban slums of Firozabad city, located in the District of Uttar Pradesh. Firozabad shares its boundaries with Mainpuri and Etawah in the east, and Etah district in the north, with the southern boundary marked by the Yamuna river. As of the 2011 census, approximately 33.3% (8.3 lakh) of Firozabad district's population resides in urban areas, with around 3.9 lakh people living in slums.

Sampling Size

For this study, a minimum target sample size of 354 pregnant women aged between 15 and 49 years was required. In the end, the sample size, including the 10% non-response rate, for the conducted study was 390.

Study Tools

We used a quantitative study tool for this study, Individual level social capital assessment tool (SCAT) with socio-economic status, including the basic demographic profile of the respondents, was used to measure the social capital of the study subjects. This tool is adopted from world bank working paper number-18 (Grootaert et al., 2003) and other section of the tool adopted for measuring the individual social capital is from the Social Survey of the Networks of the Dutch" (SSND) (Flap et al., 2003).

Ethical Considerations

The research has received approval from the institutional review board committee of IIHMR University in Jaipur, Rajasthan, India.

Study Participants' Enrolment

The list of pregnant women was obtained from the health department and anganwadi center of the urban city of Firozabad, Uttar Pradesh. Women aged between 15 and 49 years, with a confirmed pregnancy indicated by a positive urine or blood test and a gestational age ranging from 4 to 36 weeks, were eligible for inclusion in the study. Informed consent was utilized for the study participants. The consent form adhered to all ethical considerations.

Analysis

The objective of this study was to analyse the characteristics of pregnant women with social capital who is residing in the urban slums areas of Firozabad, Uttar Pradesh, India. In this analysis to determine or assess the individuals' social networks within and outside the family. Additionally, we sought to understand individuals' membership in various social institutions and their levels of trust in others. Identification of the accessibility of social resources within their networks, shedding light on the reach of their social capital. Furthermore, we examined the availability of social resources within their networks, discerning the tangible support structures surrounding them.

The collected primary data, through Survey CTO underwent a rigorous review for consistency and completeness. The Statistical Package for Social Sciences (SPSS) software version 29 was utilized for descriptive statistics were calculated to summarize and describe the main features of the dataset. Gephi Software was utilized for the social network analysis. Findings from the descriptive statistics analysis were interpreted to draw meaningful conclusions regarding the social capital and the characteristic of pregnant women.

Profile of Pregnant Women

We approached a total of 390 pregnant women in the selected research area, but 13 of them declined to participate. The study achieved a comprehensive sample coverage of 96.67%, reflecting a robust representation of the targeted population in the research analysis. The dataset presents a thorough exploration of the demographic and lifestyle attributes of the sampled pregnant women through descriptive analysis. The results in table 1 indicate that the majority of the pregnant women in the sample are between the ages of 18-25 years (60.48%), followed by those in the 26-30 years age group (32.10%). A small percentage (7.43%) are in the 31-45 years age group. The mean age of pregnant women in the sample is 25.13 years.

The distribution of pregnancy duration is almost evenly split between the second trimester (45.36%) and the third trimester (44.30%), with a smaller percentage in their first trimester (10.34%). Almost all of the pregnant women in the sample are married (99.73%). The highest percentage of pregnant women in the sample are graduates (27.59%), followed by those who have only completed middle school (15.12%). A small percentage of the sample are illiterate (8.75%). A significant portion of the sample are housewives (35.81%) or engaged in domestic work (29.71%). A smaller percentage are engaged in daily labour/labour/MGNREGA/other contract work (19.10%). The majority of the sample identify as Hindu (71.09%), followed by those who identify as Islam (28.92%). The largest caste group in the sample are OBC (51.72%), followed by SC (22.55%) and General (17.77%). A small percentage belong to the ST caste (3.98%). The majority of the sample do not smoke or consume tobacco (87.27%), with a smaller percentage who do (12.73%). Almost all of the sample do not consume alcohol (99.47%), with a very small percentage who do (0.53%).

Table 1: Background Characteristics of Pregnant women

<i>Variables</i>	<i>N (n=377)</i>	<i>Percentage</i>
Age Group		
18-25 Years	228	60.48
26-30 Years	121	32.10
31-45 Years	28	7.43
Mean Age of Pregnant women	25.13	
Pregnancy Duration		
First trimester	39	10.34
Second trimester	171	45.36
Third trimester	167	44.30
Marital Status		
Married	376	99.73
Widow	1	0.27
Education Status		
Illiterate	33	8.75
Can sign/can read only	45	11.94
Madrassa	32	8.49
Primary schooling only - until 5thStd	37	9.81
Middle schooling only- until 9thStd	57	15.12
Matriculation	16	4.24
Senior secondary schooling completed	35	9.28

Variables	N (n=377)	Percentage
Graduate	104	27.59
Masters/Postgraduate degree	18	4.77
Occupation Status		
Housewife	135	35.81
Domestic work	112	29.71
Daily labour/ labour/MGNREGA	72	19.10
Unemployed (> 18 years)	30	7.96
Skilled labour (ex: sewing/mechanic/driver)	14	3.71
Private job	14	3.71
Religion		
Hindu	268	71.09
Islam	109	28.92
Caste		
ST	15	3.98
SC	85	22.55
OBC	195	51.72
General	67	17.77
Others	15	3.98
Smoke/consume tobacco		
Yes	48	12.73
No	329	87.27
Consume Alcohol		
Yes	2	0.53
No	375	99.47

Assessment of Study Subjects' Social Capital

The evaluation of study subjects' social capital provides insights into the extent of their connections, relationships, and resources within their social networks. This assessment aims to quantify and understand the social assets that individuals can leverage for personal and community well-being.

Social Network-Group Membership

The study investigates whether individuals are members of various social, cultural, religious, business, or professional groups. This analysis sheds light on the extent to which study subjects are integrated into formal or informal networks, influencing their exposure to social interactions and support systems. The data provided in

figure 1 suggests that in the urban slum area of Firozabad city, when pregnant women were asked if they are a member of any social, cultural, religious, business, or professional group, a significant majority (91.51%) indicated that they are not members of such groups. Conversely, only a small minority (8.49%) of respondents confirmed their membership in these types of groups.

In figure 2 data provided insight into the group memberships. General Member: Pregnant women in the surveyed area show varying degrees of participation in different types of organizations. The highest reported participation is in women's groups (16), followed by health committees (6) and religious groups (2).

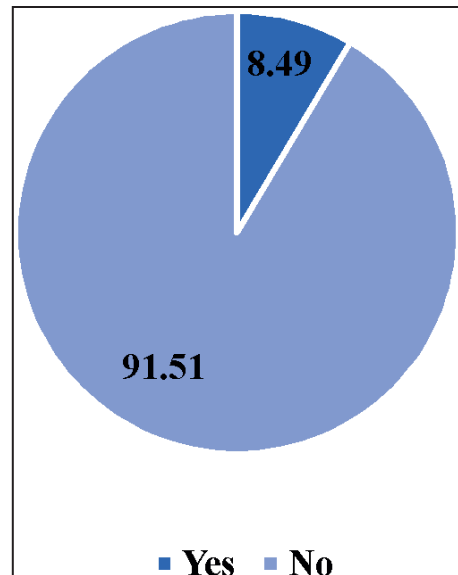


Figure 1: Membership of Any Social/Cultural / Religious Group

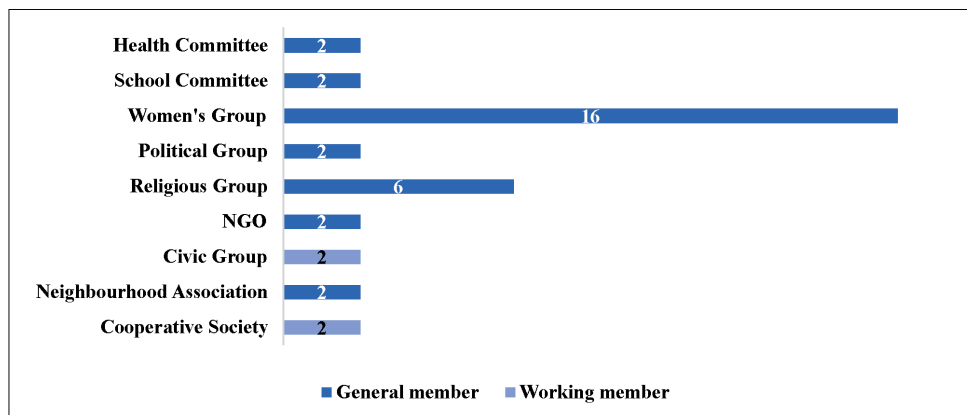


Figure 2: Degree of Participation With The Various Organization

Working Member: Some pregnant women are actively involved as Working Members, particularly in Cooperative societies (2), Neighbourhood associations (2), and Women's groups (2). Women's groups, health committees, and religious groups seem to be more popular among the surveyed pregnant women, as indicated by higher participation rates. Other organizations such as farmers'/fishermen's

groups, cooperative societies, traders' associations, and business groups have lower reported participation or none at all.

The data suggests that there may be opportunities to engage pregnant women in activities related to community health, religious or cultural events, and women's empowerment. This could reflect the social dynamics of the community, where these types of groups are more accessible or relevant to the women's lives. The low or zero participation in certain groups (e.g., Trade union, Youth group, Sports group) may indicate a lack of interest or awareness, and further exploration could provide insights into how to encourage participation in these areas. The presence of pregnant women as working members in cooperative societies and neighbourhood associations may reflect active community involvement and collaboration in addressing local issues.

Trust and Solidarity

Trust is a critical component of social capital. The study explores the levels of trust within the social networks of study subjects, aiming to understand the reliability and reciprocity in their relationships. High levels of trust contribute to the strength and effectiveness of social ties.

The data presents in the figure 3 a nuanced perspective on the level of trust and solidarity among pregnant women, as captured by their responses to the question about trust in people. The following analysis provides insights into the distribution of trust levels within this specific demographic:

The majority of pregnant women express a level of trust in people, with 13.8% explicitly stating that people can be trusted, and an additional 22.3% indicating that people can be somewhat trusted. This suggests a prevailing sense of trust within the community. A noteworthy finding is the percentage (13.00%) of pregnant women who assert that most people cannot be trusted. Remarkably, a substantial portion (8.8%) of pregnant women express doubt regarding their trust in people. Additionally, a significant proportion (40.6%) state that their level of trust depends on previous experiences. This variability suggests a diverse range of attitudes shaped by individual encounters and life experiences.

A small percentage (1.6%) refused to answer the question about trust. Even if this percentage is small, it is important to take into account possible explanations for the rejection, such as cultural differences, privacy concerns, or personal experiences that may have an impact on the readiness to share their views of trust. In conclusion,

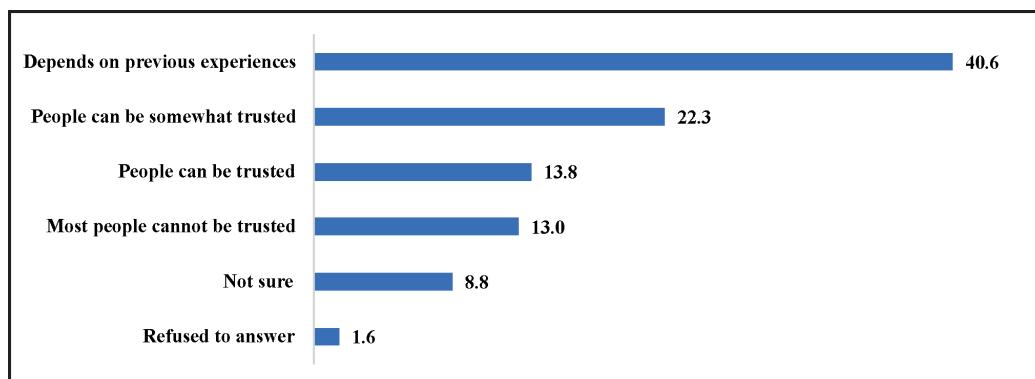


Figure 3: Percentage of Trust On People By Pregnant Women

the analysis of trust and solidarity among pregnant women reveals a diverse range of perspectives, with varying levels of trust, uncertainty, and dependence on past experiences.

The figure 4 presents data on who pregnant women respondents would contact first if a close family member falls seriously ill. The majority of respondents (91.2%) would contact a family member first. Only a small percentage would contact a relative (5.8%), friend (1.1%), or neighbour (1.1%). None of the respondents would contact an acquaintance first, and a very small percentage (0.8%) refused to answer. When it comes to the second person to contact, respondents are almost equally likely to reach out to a family member (41.6%) or a relative (42.4%). Friends (11.4%) and neighbours (3.7%) are less likely to be contacted second. Very few respondents would contact an acquaintance (0.5%) or refused to answer (0.3%). For the third person to contact, family members (43.2%) are still the most likely to be contacted, followed

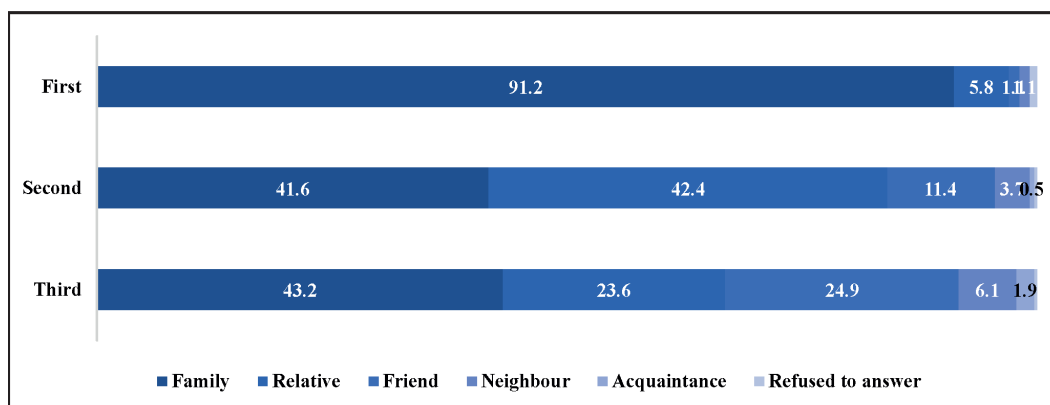


Figure 4: Percentage of Contact During Serious Illness

by friends (24.9%) and relatives (23.6%). Neighbours (6.1%) and acquaintances (1.9%) are less likely to be contacted third. A very small percentage of respondents (0.3%) refused to answer. This data suggests that in times of a family health crisis, pregnant women respondents are most likely to turn to their immediate family for support, followed by relatives and friends. Acquaintances are the least likely to be contacted.

Social Network Analysis

A social network analysis was performed using Gephi to examine the pregnant women network, she discuss important personal matters such as health, family, work, jobs, and money issues, related to diet, pregnancy and health best friends with these people may live in your household, may be relatives, friends, neighbours, work colleagues, or other persons living outside your household/other household.

Network To Discuss The Important Matters Related with Diet, Pregnancy and Health

Figure 5 presented the network degree, average weighted degree, diameter, and graph density of the subject's individual network within her area or contacts. The findings from the network analysis are as follows:

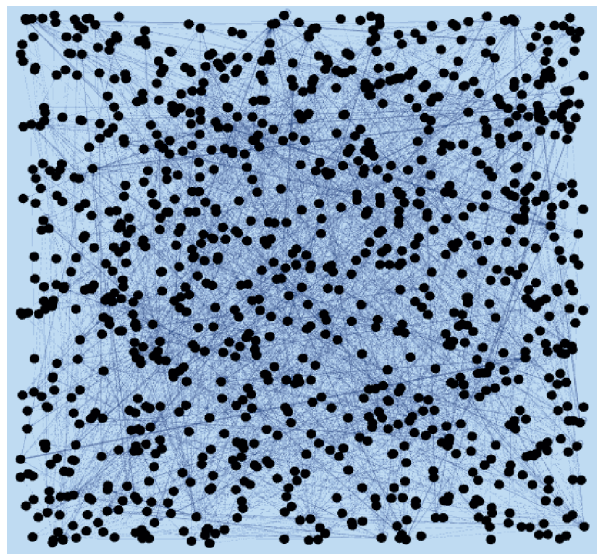


Figure 5: Network To Discuss The Important Matters Related With Diet, Pregnancy and Health

Average Degree (2.138): This is the average number of connections each person in the network has. An average degree of 2.138 suggests that each woman in the network, on average, is directly connected to a little over two other people. Each woman having discussions about personal matters, related to diet and pregnancy with approximately two other people.

Average Weighted Degree (4.341): This is the average sum of the weights of all the edges connected to a node. The weights could represent the strength or frequency of interactions. An average weighted degree of 4.341 indicates that, on average, the strength or frequency of these discussions is relatively high which suggested strong bonds or frequent communication.

Diameter (19): This is the longest shortest path between any two nodes in the network. A diameter of 19 suggests that the network is quite spread out, with the most distant individuals in the network being 19 steps away from each other which suggested a diverse range of connections.

Graph Density (0.002): This is the ratio of the number of edges in the network to the total possible number of edges. A low graph density like 0.002 suggests that the network is sparse, meaning that only a small fraction of possible connections between all pairs of individuals are actually present.

In summary, the social network analysis of the pregnant women network reveals that each woman is directly connected to approximately two other people for discussing personal matters related to diet and pregnancy and health. The strength of these discussions is relatively high, suggesting strong bonds and frequent communication. However, the network is quite spread out and sparse, indicating a diverse range of connections but a small fraction of possible connections being utilized.

Accessibility to Social Resources

The assessment focuses on how easily study subjects can access social resources within their networks. Accessibility to social resources plays a crucial role in addressing individual needs and challenges. The table 2 presents descriptive statistics (mean and standard deviation) of a sample of 377 people who mentioned at least one alter (another individual) per resource item in any relationship, and the strongest relationship when known. The resources are categorized into Domestic Resources, Expert Advice, Personal Skills, and Problem-Solving Resource. Results of analysis is the following.

Domestic Resources: Most people have someone in their network who can help with domestic tasks. For instance, 60.5% of people know someone who can help repair or construct their house, and the majority of these resources are accessed through acquaintances (43.4%). The mean scores suggest that respondents are most likely to know someone who can help with small jobs around the house (mean = 1.7), and least likely to know someone who can look after their home/children/pets/cattle if they go away (mean = 2.4).

Expert Advice: People tend to turn to family members for expert advice. 73.5% of people know someone who can give sound advice about money problems, and 48.0% of these people access this advice through a family member.

Respondents are most likely to know someone who can discuss politics with them (mean = 5.3), and least likely to know someone who can give advice on career (mean = 2.7).

Personal Skills: When it comes to personal skills, acquaintances seem to be a valuable resource. For instance, 39.0% of people know someone who can repair a broken-down car, bike, or tractor, and most of these people (43.5%) access this skill through an acquaintance. Respondents are most likely to know someone who works for their local council (mean = 5.2), and least likely to know someone who knows a lot about health and fitness (mean = 3.7).

Problem Solving Resource: Family members are often the go-to resource for problem-solving. For example, 71.1% of people know someone who can communicate fluently and effectively, and 52.2% of these people access this resource through a family member. Respondents are most likely to know a local councillor/member of local groups/volunteer groups (mean = 4.9), and least likely to know someone who can do their shopping if they are ill (mean = 2.1).

The standard deviation values indicate the variability or dispersion of the scores. A lower standard deviation means the responses are closer to the mean, while a higher standard deviation means the responses are spread out over a wider range.

The standard deviation for 'Help you to move or dispose of bulky items' under Domestic Resources is 1.4, indicating that the responses were relatively close to the mean (1.7). On the other hand, 'Help you to repair/construct your house' has a higher standard deviation (1.95), suggesting a wider spread of responses around the mean (4.3).

In summary, the data suggests that people's social networks are a valuable resource for accessing a variety of skills and expertise. The type of relationship

Table 2: Resource Generator and Responses
Percentage of sample who mentioned at least one alter per resource item in any relationship, and strongest relationship when known; n=377

Do you know anyone who...	% yes	if yes, access through					Mean	Std. Deviation
		Family member	Relative	Friend	Yourself	Acquaintance		
Domestic resources								
Help you to repair/construct your house Eg. Plumber, painter	60.5	31.1	11.8	9.2	4.4	43.4	4.3	1.95
Help you to move or dispose of bulky items	92.8	76.9	10.9	9.1	1.4	1.7	1.7	1.44
Help you with small jobs around the house	93.6	82.2	6.2	5.4	5.7	0.6	1.7	1.41
Get you cheap goods or 'bargains'	81.2	58.8	14.1	11.4	8.2	7.5	2.7	1.99
Help you to find somewhere to live if you had to move home	67.1	53.8	10.7	17.4	3.6	14.6	3.4	2.18
Lend you a large amount of money	79.3	63.2	14.4	14.0	2.3	6.0	2.6	2.01
Look after your home/children/pets if you go away	78.0	82.7	7.1	3.7	2.4	4.1	2.4	2.10
Expert Advice								
Has a professional occupation Eg. Doctor, engineer, lawyer	30.8	23.3	19.0	22.4	10.3	25.0	5.1	1.64
Knows a lot about government regulations	41.9	28.5	24.7	14.6	13.3	19.0	4.6	1.89
Has good contacts with the local newspaper, radio or TV	46.4	37.1	23.4	8.6	15.4	15.4	4.4	2.03
Give you sound advice about money problems	73.5	48.0	15.5	14.4	5.8	16.2	3.3	2.09
Give you sound advice on problems at work	48.3	29.1	11.5	23.6	8.2	27.5	4.5	1.88
Give you advice on career	79.8	56.8	23.6	5.6	5.0	9.0	2.7	2.02
Discuss politics with you	29.4	14.4	10.8	18.9	9.0	46.8	5.3	1.35
Give you sound legal advice	31.6	16.0	12.6	15.1	11.8	44.5	5.2	1.42
Give you a good reference for a job	34.5	28.5	13.1	19.2	10.8	28.5	5.0	1.72
Personal skills								
Can repair a broken-down car, bike or tractor	39.0	19.7	10.9	16.3	9.5	43.5	5.0	1.59
Is a reliable tradesman Eg. Selling of grains etc.	33.4	16.7	34.1	27.8	3.2	18.3	4.9	1.72
Is good at gardening, farming, agriculture	34.7	22.9	36.6	9.9	6.1	24.4	4.9	1.80
Works for your local council	34.2	10.1	20.9	14.7	14.0	40.3	5.2	1.44
Can sometimes employ people	43.5	12.2	15.9	11.0	20.7	40.2	5.0	1.52
Knows a lot about health and fitness	63.7	45.8	16.3	10.4	6.3	21.3	3.7	2.15
Problem solving resource								
Can communicate fluently and effectively	71.1	52.2	15.3	10.8	8.2	13.4	3.3	2.14
Knows how to fix problems with computers/ electronic gadgets	42.2	23.3	27.0	15.1	2.5	32.1	4.7	1.83
Is a local councillor/ member of local groups/ volunteer groups	31.8	26.7	34.2	7.5	10.0	21.7	4.9	1.78
Do your shopping if you are ill	88.1	76.5	9.3	5.4	3.3	5.4	2.1	1.78
Lend you a small amount of money	86.5	63.8	12.0	14.7	3.4	6.1	2.3	1.83

(family, friend, acquaintance, etc.) can influence the type of resource accessed. For instance, family members are often turned to for expert advice and problem-solving, while acquaintances are valuable for their personal skills. This highlights the importance of diverse social networks in providing access to a wide range of resources.

Availability of Social Resources

The study examines the range and abundance of social resources within the study subjects' networks. This encompasses the diversity of support, advice, and assistance that individuals can tap into, contributing to their overall social well-being and resilience in the face of various life circumstances. The table 3 presents data on the relationships between the survey respondents (n=377) and people they know who hold various occupations. Here are some analytical findings based on the data.

Respondents are most familiar with the occupation of "Daily Labourer," with almost 60% of them knowing someone in this position. The mean relationship score is 1.35, suggesting that, on average, respondents have a family-like relationship with these individuals. While only 2.7% of respondents know a barber, those who do mostly have family relationships. The mean relationship score is 2.2, indicating a somewhat close association.

About 5.6% of respondents know a doctor, with a mean relationship score of 2.67. Relatives with doctors are more common among the respondents. Only 1.1% of respondents know an engineer, and in all cases, it's a family member. Around 7.2% of respondents know a factory worker, with family members being the most common relationship. Shopkeeper/Grocer While only 2.1% of respondents know a shopkeeper/grocer, the relationships vary between family, relatives, and acquaintances. The mean relationship score is relatively high at 3.25, suggesting varied but often close relationships. Positions like Farmer Owner and Ward Member are known by a relatively small percentage of respondents, but when known, they are usually family members.

For those who know a plumber (0.5% of respondents), the relationship is primarily with neighbours, and the mean relationship score is high at 3, indicating a relatively close association. About 1.3% of respondents know a priest, and the relationship is mainly with acquaintances and neighbours. The mean relationship score is 4.8, indicating a relatively close association. Only 0.5% of respondents know a goldsmith, but when they do, the relationship is exclusively with acquaintances.

Table 3: Position Generator and Responses
Percentage of sample who mentioned at least one occupation per resource
item in any relationship when known; n=377

Do you know anyone who is a/an	% Yes (n=377)	Relationship if yes (%)						Mean	Std. Deviation
		Family	Relative	Friend	Neigh- bour	Acquain- tance	None		
Agricultural labourer	3.7	14	50	14	7	14	0	2.57	1.284
Barber	2.7	60	0	10	20	10	0	2.2	1.619
Clerk	0.5	0	100	0	0	0	0	2	0
Daily labourer	59.9	83	5	7	4	0	1	1.35	0.872
Doctor	5.6	0	62	19	10	10	0	2.67	1.017
Engineer	1.1	100	0	0	0	0	0	1	0
Factory Worker	7.2	63	19	11	7	0	0	1.63	0.967
Farmer Dairy	3.4	23	31	15	31	0	0	2.54	1.198
Farmer Owner	3.4	38	46	0	15	0	0	1.92	1.038
Glass Blower	3.4	54	15	15	15	0	0	1.92	1.188
Goldsmith	0.5	0	0	0	0	100	0	5	0
Hunter/Fisherman	0.5	0	100	0	0	0	0	2	0
Ward Member	0.5	100	0	0	0	0	0	1	0
Plumber	0.5	0	0	100	0	0	0	3	0
Potter	0.3	100	0	0	0	0	0	1	.
Priest	1.3	0	0	0	20	80	0	4.8	0.447
Shopkeeper/ Grocer	2.1	25	25	0	0	50	0	3.25	1.909
Tailor	1.9	43	29	0	0	29	0	2.43	1.813
Teacher	3.4	46	23	15	15	0	0	2	1.155

The mean relationship score is 5, suggesting a somewhat distant association. Those who know a tailor (1.9% of respondents) have mixed relationships with family and relatives. The mean relationship score is 2.43, indicating a moderate level of closeness. Occupations like Teacher and Glass Blower have moderate familiarity, with 3.4% of respondents knowing someone in these positions.

Conclusion

The study conducted in Firozabad, Uttar Pradesh, aimed to assess different facets of social capital among pregnant women. It included demographic characteristics,

membership in social networks, trust, and accessibility to social resources. The findings shine a light on the social context that pregnant women in this region navigate during their pregnancies and strive for support. An illustration of the sampled population in the study analysis is ensured by the high sample coverage of 96.67%. Most of the pregnant women in the sample were aged between 18 and 25, which aligns with findings from a study by Sharma et al. (2019) showing a similar age distribution among pregnant women in North India. Pregnant women in the sample had a mean age of 25.13 years, which was a little bit younger than the 26.5 years national average reported by the National Family Health Survey (NFHS-4).

One good thing about the study sample is that it had a diverse range of educational backgrounds, with the 27.59 percentage pregnant women being graduates. This is a positive finding because improved maternal health outcomes have been linked to women with higher levels of education. That being said, it is regarding that a very small portion of the sample lacked literacy, which is extremely concerning and emphasises the necessity for treatments that are available to women with varying levels of education (Goli, S., et al. 2017). Most of the pregnant women found as Hindu and belonged to the OBC caste; most were housewives or worked in household roles. Socioeconomic determinants may have a major impact on the sampled population's health outcomes previous research support to results (Singh, A. et al 2012). Given the show negative effects of alcohol and tobacco on the health of both mothers and foetuses, the lifestyle features show that the sample has a low percentage of tobacco and alcohol intake (Patra et al 2014).

The social network study revealed differences in the respondents' group engagement. While some were part of formal social support networks, others were not involved in religious organisations, women's clubs, or health committees. In addition, there were variations in respondents' perceptions of social network trust and solidarity, with most expressing a broad sense of trust. Study on social network of pregnant women offers valuable evidence that could influence public health interventions. This could offer a beneficial environment for sharing first-hand information and experiences regarding general health, pregnancy, and nutrition. However, the sparsity of the network, indicated by the graph density, suggests that there are many probable connections that are not being applied. This could limit the spread of information and assistance within the network. Therefore, Interventions can be focused to improve the overall strength and resilience of the network in these area. Study suggested that to explore the effects of these network features on the health

of the pregnant women in the network, more research is required. More exploration study that could improve the interventions and increase program effectiveness.

The study's findings found that a clear understanding of the social resources that pregnant women in Firozabad, Uttar Pradesh, have easy access to. The study concludes that social networks are an excellent means for people to gain access to a variety of skills and knowledge. The type of resource that is accessible can vary depending on the type of relationship friend, acquaintance, family, etc. The majority of respondents indicated that they know someone in their network who can help with housework, and the primary source of these services is through acquaintances. This is consistent with a research by Wellman and Wortley (1990) that found friends frequently offer instrumental assistance, like housework or repair assistance.

People tend to turn to family members for expert advice. A significant percentage of people know someone, like, who can give sound advice about money problems, and these people access this advice through a family member. This sort of aligns with the findings of a study by (Burt 1992), which like suggested that family members is often the primary source of advice and emotional support or something. When it comes to personal skills, acquaintances seem to be like a valuable resource, kind of. This could be due to the diverse range of skills and expertise found in someone's broader social network (Granovetter 1973). Family members are often the go to resource for problem-solving. This could be due to the trust and shared understanding that often characterizes family relationships or whatever (Marsden and Campbell 1984).

The study provides a very extensive analysis of the social resources available the respondents' network, specifically focusing on the diversity of support, advice, and assistance that individuals can potentially access. The findings reveal a significant variation in the familiarity with different occupations and the nature of relationships with individuals in these roles. The occupation of "Daily Labourer" emerged as the most familiarity, with a majority of respondents knowing someone in this position. This suggests that daily laborers form a decisively significant part of the respondents' social networks, potentially providing a readily accessible source of support and advice.

In contrast, occupations such as barber, doctor, engineer, and factory worker known to a smaller percentage respondents. However, those who do know individuals in these roles often have close familial relationships with them, indicating a potential for strong support networks within these occupations. Interestingly,

even less familiar occupations like shopkeeper/grocer, farmer owner, and ward member, when known, usually family members, suggesting that these roles, though less common, still can provide valuable social resources due to the familial ties.

In conclusion of the demographic and lifestyle factors affecting pregnant mothers in Firozabad, Uttar Pradesh, the insights gathered could possibly lead to more targeted interventions for the enhancement of maternal health outcomes. It is important to note the role of a diverse social network in providing access to important resources. This stresses the urgent need for interventions that not only promote but also maintain such connections among pregnant women. The understanding of these dynamics can, in turn, have a positive impact on community health and resilience.

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