



Impact Of Self-Help Groups On Health And Administration Of Women (A study in East Godavari district, Andhra Pradesh)

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Abstract

This study demonstrates the benefits of SHGs at selective 5 mandals of East Godavari district on health and administration status among marginalised women in Andhra Pradesh, India. These results, coupled with several policy changes and a move towards strengthening the National Rural Health Mission, should be a call to action for the government of Andhra Pradesh and other state-led government agencies to capitalise on this platform for health with nutrition and sanitation developments and administration with build confidence in work performance and develop linkages with banks and other offices. The findings of this study reinforce the need for more resolute interest and investment in strengthening the SHG movement, not only for livelihood generation and financial inclusion among poor women and their families, but also systematically leverage on the social capital created out of the women's group to better target health and administrative programs among the difficult-to-reach population, particularly poor women and their families. In particular, SHGs can play a critical role in improving awareness of critical health issues, facilitating frontline health workers in early detection and screening of non communicable conditions, and make progress in relation to financial coverage and utilization of publicly financed national health protection schemes. Thus, this study has broad applicability as the SHG platform may potentially be leveraged for improvement of health and administrative status of women and related outcomes.

Keywords: Impact, self-help groups, health status, administration status

Introduction

Self-Help Groups (SHGs) have been a significant tool in empowering women across India. These groups aim to enhance the economic and livelihood security of women, particularly in rural areas. The concept of SHGs was initiated by women groups and has since evolved to become a strategic intervention for financial inclusion and socio-economic development. Evidence is growing for non-financial outcomes as well, including political empowerment, social cohesion, collective action and personal agency, and health (Brody, et al., 2016)¹. SHGs are also an important mechanism used by the Indian Government to engage poor women in central systems, including health and poverty reduction schemes (Kumar, et al., 2019)². The theoretical frameworks that underlie SHG implementation and evaluation derive primarily from a participant empowerment model, wherein group members become empowered as individuals as well as engage in collective action, increasing self-efficacy and participation in specific dialogues about their circumstances, thereby increasing women's agency and autonomy, including for health-related decision-making (Saha, 2017)³.

Connection to a frontline worker (FLW) such as an Accredited Health Social Activist (ASHA) also appears to be an important contributor to health impact (Tripathy, et al., 2016)⁴. Thus, SHGs have had a profound impact not only on socio-economic status of women in India but also providing them with opportunities to improve their financial standing, gain social recognition, improve health status and participate actively in community life and administration. Despite challenges, the positive outcomes of SHGs underscore their importance as a development strategy for empowering women and promoting inclusive growth in health and administration. Thus, SHGs play a crucial role in spreading health awareness among women, leading to better health practices and access to healthcare facilities (Mehta, et al., 2020)⁵. Programs often include training on nutrition, sanitation, and disease prevention. Because of the varied form and structure of SHGs, their importance may extend well beyond purely financial and livelihood outcomes, leading to changes in health-related behaviours, shifting social norms and improving a wide range of health-related outcomes.

The necessity to empower communities into taking charge and initiating lead of their health related issues has featured high on the agenda of policy makers and social activists world-wide. This urgency has frequently been argued with self help being recognized as a necessary component of primary health care strategy, one prioritizing the ethos of, people's health in people's hands (Robinson, 1980)⁶. One of the core principles of self help is that only those experiencing the problem can understand it, this, allotting immense value to biographical experience and first-person narratives in illness and health (Robinson D, 1981)⁷.

Therefore, the growth of SHGs in India has also to be seen in the light of status of women in India. Inequity in accessing health care is better addressed through interventions that lie outside the conventional biomedical pattern. With lower income levels and unequal social status, poor women are more likely to be impoverished by health-care costs (Hazra, et al., 2020)⁸. The group lending model of microfinance reduces

¹ Brody C, De Hoop T, Vojtkova M, Warnock R, Dunbar M, Murthy P, et al. Economic self-help group programmes for improving women's empowerment: a systematic review. London: International Initiative for Impact Evaluation (3ie). 2016.

² Kumar N, Raghunathan K, Arrieta A, Jilani A, Chakrabarti S, Menon P, et al. Social networks, mobility, and political participation: The potential for women's self-help groups to improve access and use of public entitlement schemes in India. *World Dev.* 2019;114:28-41.

³ Saha S. Expanding health coverage in India: role of microfinance-based self-help groups. *Glob Health Action.* 2017;10:1321272.

⁴ Tripathy P, Nair N, Sinha R, Rath S, Gope RK, Rath S, et al. Effect of participatory women's groups facilitated by Accredited Social Health Activists on birth outcomes in rural eastern India: a cluster-randomised controlled trial. *Lancet Glob Health.* 2016;4:e119-28.

⁵ Mehta KM, Irani L, Chaudhuri I, Mahapatra T, Schooley J, Srikantiah S, et al. (2020). Health layering of self-help groups: impacts on reproductive, maternal, newborn and child health and nutrition in Bihar, India. *J Glob Health.*

⁶ Robinson D (1980), The Self Help Component of Primary Health Care, *Social Science and Medicine*, 14 A: 415-421

⁷ Robinson D (1981), Self Help Groups in Primary Health Care, *World Health Forum*, 2: 185-191

⁸ Hazra A, Atmavilas Y, Hay K, Saggurti N, Verma RK, Ahmad J, et al. Effects of health behaviour change intervention through women's self-help groups on maternal and newborn health practices and related inequalities in rural India: A quasi-experimental study *Eclin Med.* 2020;18:100198

health inequities by promoting social capital (Schurmann, 2007)⁹.

Early evidence from the study of Baru and Surekha (2012) identified innovation has generated increased awareness about the importance of antenatal care, immunization, and institutional deliveries and enhanced the Janani Suraksha Yojana uptake among community women (Baru and Surekha, 2012)¹⁰. A study done by Mohindra, et al. (2008) in Kerala found that SHG participation can help protect poor women against exclusion from health care and could possibly aid in promoting their mental health (Mohindra, Haddad and Narayana, 2008)¹¹. Reshmi et al. (2019) in their study in three eastern Indian states found that women who were a part of SHGs demonstrated better control over financial resources, better participation in community activities, and higher receipt of antenatal care services when compared to their counterparts (Reshmi, et al., 2019)¹². Apart from these, Kumar, et al. (2019) found in their study that the membership of SHG leads to better knowledge about the public entitlements and also significantly raises the likelihood of availing greater number of public entitlement schemes (Kumar, et al., 2019)¹³. In addition to the above studies indicate that self help group programmes often in the form of credit or micro credit schemes and savings have succeeded in changing the lives of poor women by making awareness on the health and administrative aspects for enhanced income and economic self-esteem. This is evident from the mushrooming growth of self-help groups in the state. Thus, this study is undertaken to analyse the the impact of Self Help Groups on health and administrative status of women beneficiaries in East Godavari district of Andhra Pradesh.

Objectives

1. To study the impact of SHGs on the health status of women;
2. To study the impact of SHGs on the administrative status of women;
3. To examine the impact of SHG membership on health and administrative activities of women with reference to their demographic aspects;

Methodology

The study updates the earlier, and first to the best of its knowledge, empirical analysis of impact of SHG membership of women on the key indicators of health and self-administration. Since, the study is analytical based on collection of data from both primary and secondary sources, the author obtained the primary data from the SHG members of selective 5 mandals of East Godavari district with the help of a pre-designed questionnaire during the year 2022-23. These mandals are Kakinada (rural), Rajahmundry (rural), Pithapuram, Amalapuram and Prathipadu which are covered all corners of the district. From each mandal 80 SHG women were selected randomly, and all together 400 samples considered in this study. Thus, primary data was collected from well structured questionnaire, Secondary data obtained from various published and unpublished books, journals and articles of various authors. There is restricted number of SHG women respondents in taking sample from beneficiaries (who are active in SHGs). It becomes possible for the sample to cover majority of the women SHG members, especially married. Apart from this the area selected for the study has accessibility to the researcher which in turn will have facility for data collection.

Analysis of Data

After data collected from the respondents through a questionnaire, it was processed through SPSS software and analysed. In this process average and percentage analysis was carried out to draw meaningful interpretation of the results. Thus, frequency and percentage analysis and ANOVA test has been used for data

⁹ Schurmann, A. Microcredit, inclusion and exclusion in Bangladesh. Background Paper for the Social Exclusion Knowledge Network on the Social Determinants of Health." 2007 Geneva World Health Organization

¹⁰ Baru R, Surekha D. Mahila Samakhya's Approaches to Health, in Cartographies of Empowerment: The Mahila Samakhya Story 2012 New Delhi Zubaan; Kandpal, Eeshani, Kathy Baylis and Mary

¹¹ Mohindra K, Haddad S, Narayana D. Can microcredit help improve the health of poor women? Some findings from a cross-sectional study in Kerala, India Int J Equity Health. 2008;7:2

¹² Reshmi RS, Dinachandra K, Bhanot A, Unisa S, Menon GT, Agrawal N, et al Context for layering women's nutrition interventions on a large scale poverty alleviation program: Evidence from three eastern Indian states PLoS One. 2019.

¹³ Kumar N, Raghunathan K, Arrieta A, Jilani A, Chakrabarti S, Menon P, et al Social networks, mobility, and political participation: The potential for women's self-help groups to improve access and use of public entitlement schemes in India World Dev. 2019;114:28-41

analysis. Hence, the output results are presented in the following tables and the findings from the data analysis are listed at the end.

The Table-1 represents the demographic variable wise distribution of the samples. It is clear from the data that majority group of respondents are in the age group between 26 and 35 years, followed by 40.2 percent of the respondents who are in the age group of 36-45 years. There are however 9.8 percent and 7.8 percent of the respondents who are above 45 years and below 25 years respectively. From the above analysis, it can be concluded that majority of the respondents are in the middle-age group; who can lead their life actively.

Table – 1: Distribution of sample respondents by their demographic variables

Demographic variables	Demographic groups	Frequency	Percent
Age of the respondents	< 25 years	31	7.8
	26-35 years	169	42.2
	36-45 years	161	40.2
	> 45 years	39	9.8
Education qualification	Illiterate	72	18.0
	Primary	58	14.5
	Secondary	96	24.0
	Intermediate	57	14.2
	Graduation	64	16.0
	Post Graduation	53	13.3
Occupation of the respondents	Housewife	210	52.5
	Govt. Employee	25	6.3
	Private Employee	79	19.8
	Self Employee	19	4.8
	Wage labor	54	13.5
	Business	13	3.3
	Total	400	100.0

Since, education is an asset bestowed by almighty on mankind and an educated person is more discriminative than an uneducated person, the distribution of SHG women by their literacy levels indicate that majority of the respondents studied upto secondary level education (24.0%), followed by graduation (16.0%), intermediate (14.2%), primary education (14.5%) and post graduation (13.3%). However, 18% of the SHG women are illiterates. It can be concluded from the above table shows that most of respondents are literates which is a healthy sign for the success of self-help group movement.

Distribution of sample respondents by their occupational status revealed that as many as 52.5% are housewives followed by 19.8 percent who are private employees and 13.5% who are Wage Labour. There are however 6.3% and 3.3% who are government servants and business entrepreneurs respectively. Thus it can be concluded that majority of the females in the sample are housewives.

Health aspects

Health is wealth. To achieve this, one must keep his surroundings clean; as cleanliness is next to godliness. The Group members must know this fact. They should keep their surroundings clean. They should take nutrition food themselves and provide the same to their children and other family members. The members should possess health knowledge to the extent possible to make their family members disease-free. To date, evidence about the impact of SHGs on health outcomes has been derived from pilot-level interventions, some using randomised controlled trials and other rigorous methods. Here in this context the evidence of the impact of SHGs on the health and sanitation awareness among the members of SHGs is presented in Table 5.36.

Table – 2: Impact of SHGs on health status of beneficiaries

Sl. No.	Health and Sanitation Factors	Increased	No change	Decreased	Total
1	Access to Health services	306 (76.5)	94 (23.5)	-	400 (100.0)
2	Access to immunization	212 (53.0)	185 (46.2)	3 (0.8)	400 (100.0)
3	Access to sanitation facility	260 (65.0)	140 (35.0)	-	400 (100.0)
4	Nutrition awareness	275 (68.7)	125 (31.3)	-	400 (100.0)
5	Family planning awareness	220 (55.0)	177 (44.2)	3 (0.8)	400 (100.0)
6	Health awareness	281 (70.2)	119 (29.8)	-	400 (100.0)
7	Health status of family members	265 (66.2)	129 (32.3)	6 (1.5)	400 (100.0)
8	Intake nutrition food habits	238 (59.5)	158 (39.5)	4 (1.0)	400 (100.0)
9	Hygienic environmental conditions	278 (69.5)	122 (30.5)	-	400 (100.0)
10	Health status of respondent	288 (72.0)	112 (28.0)	-	400 (100.0)

It is observed from the table that 76.5 % of the respondents felt that they have access to health services 53% of the respondents opined that they have access to immunization 65% expressed that they have access to sanitation facilities, 68.7% expressed that they gained nutrition knowledge, 55% of the respondents felt that they gained knowledge on family planning, 70.2% said that they got health awareness knowledge, 69.5% revealed that they got knowledge on hygienic environmental conditions. There are however some respondents who felt no impact on their health conditions by becoming group member. Thus it can be concluded that there is a phenomenal health consciousness among majority of the respondents after becoming group member.

Administrative Factors

Women constitute around fifty percent of the total human resources in our economy but they are the poor privileged than men as they are subject to many socio-economic and cultural constraints. Women development activities must be given importance to increase their skills for better standard of living. Self Help Groups (SHGs) are emerging as a cost effective mechanism and increased the administrative skills among the women. In this context Table 3 provides some evidence of administrative skills among women.

Table – 3: Impact of SHGs on administrative status of beneficiaries

Sl. No.	Administrative status	Increased	No change	Decreased	Total
1	Confidence building	220 (55.0)	167 (41.7)	13 (3.3)	400 (100.0)
2	Working skills	226 (56.5)	166 (41.5)	8 (2.0)	400 (100.0)
3	Marketing linkages	212 (53.0)	185 (46.2)	3 (0.8)	400 (100.0)
4	Linkage with banks	227 (56.7)	173 (43.3)	-	400 (100.0)
5	Linkages with government officials	297 (74.3)	103 (25.7)	-	400 (100.0)
6	Linkages with political leaders	196 (49.0)	204 (51.0)	-	400 (100.0)
7	Knowledge on rights, entitlements and development programmes of women	179 (44.7)	221 (55.3)	-	400 (100.0)
8	Managerial efficiency for micro enterprise development	199 (49.7)	201 (50.3)	-	400 (100.0)
9	Active participation in development programmes	246 (61.5)	154 (38.5)	-	400 (100.0)
10	Participation in group activities	291 (72.8)	102 (25.4)	7 (1.8)	400 (100.0)

It is evident from the table that 55% of the respondents opined that after becoming member they have experienced confidence building, 56.5% developed working skills, 53% developed marketing linkages, 56.7% developed linkages with banks, 74.3% developed linkages with government officials, 49% developed linkages with political leaders, 44.7% got knowledge on women rights, 49.7% got managerial efficiencies for organising SHGs, 61.5% got opportunity to activity participate in development programmes, 72.8% got opportunity for participation in group activities. There are however some respondents who felt no impact on these issues after they become SHG member. Such respondents varied between 25.4% and 55% can the whole it can be concluded that majority of the respondents have experienced positive impact on various administrative issues by becoming SHG member.

Impact of SHGs on Health status of women beneficiaries

Table 4 shows the significance level of difference among respondents with different age groups with regard to impact of SHGs on health status of women using ANOVA test.

Table – 4: Impact of SHGs on health status of women among different age groups

Age	N	Mean	Std. Deviation	Std. Error	f-value	p-value
< 25 years	31	16.26	1.483	0.266	**6.685	0.000
26-35 years	169	16.64	1.066	0.082		
36-45 years	161	16.66	1.689	0.133		
> 45 years	39	15.62	1.330	0.213		
Total	400	16.52	1.433	0.072		

**Significant at 1% level.

It is seen from the table that the mean performance of 36-45 years age group of respondents (16.66) found little higher than SHG members who are between 26-35 years (16.64), below 25 years (16.26) and above 45 years age group (15.62). Therefore, the tested f-value is 6.685 which is found significant at 1% level because the p-value is 0.00. Hence, the above analysis indicates that there is a significant difference among different age groups respondents towards the impact of SHGs on health and sanitation issues, where, middle age group respondents are more perceived than others.

Table 5 shows the level of significance difference among various literacy level respondents regard impact of SHGs on health status of women using ANOVA test.

Table – 5: Impact of SHGs on health status of women among different education groups

Education Qualification	N	Mean	Std. Deviation	Std. Error	f-value	p-value
Illiterate	72	16.92	1.340	0.158	**6.242	0.000
Primary	58	16.69	1.111	0.146		
Secondary	96	16.05	1.612	0.164		
Intermediate	57	17.05	1.420	0.188		
Graduation	64	16.13	1.609	0.201		
Post Graduation	53	16.53	.868	0.119		
Total	400	16.52	1.433	0.072		

**Significant at 1% level

The mean perceptions of intermediate holders as can be seen from the table (17.05) found little higher than primary education (16.69), post graduates (16.53), graduates (16.13), secondary education (16.05) and illiterates (16.92). Therefore, the tested f-value is 6.242 found significant at 1% level because the p-value is 0.00. It shows that there is a significant difference in the perceptions of different educational group respondents towards impact of SHGs on health and sanitation issues, where the intermediate qualified SHG members found higher than others.

Table 6 shows significant difference on the impact of SHGs on health status of women respondents with different to their occupational background using ANOVA test.

Table – 6: Impact of SHGs on health status of women among different occupational groups

Occupation	N	Mean	Std. Deviation	Std. Error	f-value	p-value
Housewife	210	16.54	1.494	0.103	**4.130	0.001
Govt. Employee	25	16.36	1.221	0.244		
Private Employee	79	16.16	1.489	0.167		
Self Employee	19	16.63	0.496	0.114		
Wage labor	54	17.17	1.060	0.144		
Business	13	15.77	1.833	0.508		
Total	400	16.52	1.433	0.072		

**Significant at 1% level.

As can be seen from the table that the average performance of wage labourers (17.17) found little higher than self employees (16.63), house wives (16.54), government employees (16.36), private employees (16.16) and business people (15.77). Hence, the calculated f-value is 4.130 found significant at 1% level because the p-value is 0.001. Therefore, the above analysis infers that there is a significant difference between and within the above SHG members with different occupation levels on health and sanitation factors, where, wage labours opined comparatively higher than others.

Impact of SHGs on Administrative status of women beneficiaries

Table 7 shows level of significant difference on the impact of SHGs on administrative status of various age group respondents using ANOVA test.

Table – 7: Impact of SHGs on administrative status of various age group women

Age	N	Mean	Std. Deviation	Std. Error	f-value	p-value
< 25 years	31	16.45	1.287	0.231	**12.879	0.000
26-35 years	169	16.33	2.002	0.154		
36-45 years	161	14.92	2.552	0.201		
> 45 years	39	15.15	2.346	0.376		
Total	400	15.66	2.330	0.117		

**Significant at 1% level.

It is clear from the table that the average performance of below 25 years age group of respondents on administrative factors (16.45) found higher than 26-35 years (16.33), 36-45 years age group (14.92) and above 45 years age group respondents (15.15). While the tested f-value 12.879 found significant at 1% level, this shows that there is a difference among the respondents with different age groups in their opinion on impact of SHGs on administrative factors, where the lower age group respondents are high.

Table 8 illustrates significant level difference on the impact of SHGs on administrative status among the respondents with different educational background using ANOVA test.

Table – 8: Impact of SHGs on administrative status of various education qualification group women

Education Qualification	N	Mean	Std. Deviation	Std. Error	f-value	p-value
Illiterate	72	14.24	2.236	0.264	**11.762	0.000
Primary	58	15.33	2.114	0.278		
Secondary	96	15.83	2.721	0.278		
Intermediate	57	16.49	1.928	0.255		
Graduation	64	15.48	1.633	0.204		
Post Graduation	53	16.92	1.940	0.266		
Total	400	15.66	2.330	0.117		

**Significant at 1% level.

It is found that the mean performance of post graduates (16.92) found significantly little higher than the SHG members who are with intermediate (16.49), secondary education (15.83), graduation (15.48), primary education (15.33) and illiterates (14.24). Therefore, the tested f-value is 11.762 found significant at 1% level because the p-value is 0.00. Hence, the above analysis shows that there is a significant difference among the respondents with different education levels towards impact of SHGs on administrative factors, where, the post graduate respondents found higher than others.

Table 9 presents significant difference on the impact of SHGs on administrative status among the respondents with different occupational background using ANOVA test.

Table – 5.55: Impact of SHGs on administrative status of various occupational group women

Occupation	N	Mean	Std. Deviation	Std. Error	f-value	p-value
Housewife	210	15.89	2.564	0.177	*3.010	0.011
Govt. Employee	25	14.72	2.208	0.442		
Private Employee	79	15.84	1.613	0.181		
Self Employee	19	14.21	1.584	0.363		
Wage labor	54	15.39	2.414	0.328		
Business	13	15.77	1.787	0.496		
Total	400	15.66	2.330	0.117		

*Significant at 5% level.

According to the above table the average performance of housewives towards impact of HSGs on administrative factors (15.89) found higher than private employees (15.84), business people (15.77), wage labourers (15.39), government employees (14.72) and self employees (14.21). Hence, the calculated f-value 3.010 found significant at 5% level because the p-value is 0.011. Therefore, the above analysis infers that there is a significant difference between and within the group of respondents based on their occupations towards the impact of SHG membership on administrative factors, where housewives perceived comparatively higher than others.

Conclusion

This study demonstrates the benefits of SHGs at selective 5 mandals of East Godavari district on health and administration status among marginalised women in Andhra Pradesh, India. These results, coupled with several policy changes and a move towards strengthening the National Rural Health Mission, should be a call to action for the government of Andhra Pradesh and other state-led government agencies to capitalise on this platform for health with nutrition and sanitation developments and administration with build confidence in work performance and develop linkages with banks and other offices. The findings of this study reinforce the need for more resolute interest and investment in strengthening the SHG movement, not only for livelihood generation and financial inclusion among poor women and their families, but also systematically leverage on the social capital created out of the women's group to better target health and administrative programs among the difficult-to-reach population, particularly poor women and their families. In particular, SHGs can play a critical role in improving awareness of critical health issues, facilitating frontline health workers in early detection and screening of non communicable conditions, and make progress in relation to financial coverage and utilization of publicly financed national health protection schemes. Thus, this study has has broad applicability as the SHG platform may potentially be leveraged for improvement of health and administrative status of women and related outcomes.

References

1. Baru R, Surekha D. Mahila Samakhya's Approaches to Health, in Cartographies of Empowerment: The Mahila Samakhya Story 2012 New Delhi Zubaan; Kandpal, Eeshani, Kathy Baylis and Mary
2. Brody C, De Hoop T, Vojtkova M, Warnock R, Dunbar M, Murthy P, et al. Economic self-help group programmes for improving women's empowerment: a systematic review. London: International Initiative for Impact Evaluation (3ie). 2016.
3. Hazra A, Atmavilas Y, Hay K, Saggurti N, Verma RK, Ahmad J, et al Effects of health behaviour change intervention through women's self-help groups on maternal and newborn health practices and related inequalities in rural India: A quasi-experimental study Eclin Med. 2020;18:100198
4. Kumar N, Raghunathan K, Arrieta A, Jilani A, Chakrabarti S, Menon P, et al. Social networks, mobility, and political participation: The potential for women's self-help groups to improve access and use of public entitlement schemes in India. World Dev. 2019;114:28-41.
5. Kumar N, Raghunathan K, Arrieta A, Jilani A, Chakrabarti S, Menon P, et al Social networks, mobility, and political participation: The potential for women's self-help groups to improve access and use of public entitlement schemes in India World Dev. 2019;114:28-41
6. Mehta KM, Irani L, Chaudhuri I, Mahapatra T, Schooley J, Srikantiah S, et al. (2020). Health layering of self-help groups: impacts on reproductive, maternal, newborn and child health and nutrition in Bihar, India. J Glob Health.
7. Mohindra K, Haddad S, Narayana D. Can microcredit help improve the health of poor women? Some findings from a cross-sectional study in Kerala, India Int J Equity Health. 2008;7:2
8. Reshmi RS, Dinachandra K, Bhanot A, Unisa S, Menon GT, Agrawal N, et al Context for layering women's nutrition interventions on a large scale poverty alleviation program: Evidence from three eastern Indian states PLoS One. 2019.
9. Robinson D (1980), The Self Help Component of Primary Health Care, Social Science and Medicine, 14 A: 415-421
10. Robinson D(1981), Self Help Groups in Primary Health Care, World Health Forum, 2: 185-191
11. Saha S. Expanding health coverage in India: role of microfinance-based self-help groups. Glob Health Action. 2017;10:1321272.
12. Schurmann, A. Microcredit, inclusion and exclusion in Bangladesh. Background Paper for the Social Exclusion Knowledge Network on the Social Determinants of Health." 2007 Geneva World Health Organization
13. Tripathy P, Nair N, Sinha R, Rath S, Gope RK, Rath S, et al.Effect of participatory women's groups facilitated by Accredited Social Health Activists on birth outcomes in rural eastern India: a cluster-randomised controlled trial. Lancet Glob Health. 2016;4:e119-28.