# Making health care accessible to women: A study on participation of women in SHGs in Sundarbans, West Bengal, India

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**Abstract:**

Purpose: The purpose of this research is to understand the correlation between access to health care and participation of rural women in Self Help Groups (SHGs). The study also focuses on the access to finances through SHGs and its impact on the overall empowerment the women members.

Methodology: Mixed methods design was used to undertake the study covering women members from functional and non-functional SHGs in the delta region of Sundarbans, West Bengal, India. Structured interview tool was used for 234 members of sampled SHGs across the two categories; functional and non-functional. Qualitative tools were used to capture views of the other stakeholders such as local leaders, Frontline Health Workers. Descriptive analysis and binary regression analysis were used to find the comparison between the two categories.

Findings: The more vulnerable members-representing poorer, less literate, disadvantaged social groups, reflected higher propensity to slip into non-functional SHGs. A significant association was found between functionality of groups and women believing it is important to take care of their own health. The functional SHG members are more aware about the dietary needs and immunization needs of children below two years. Overall, significant association with functionality of groups emerged through regression analysis across a range of variables. This depicted that a higher proportion of women from functional groups delivered the know their local health worker made decisions regarding their own health and delivered last child in an institution. However, a significant proportion of members still visit unregistered local medical practitioners, popularly called, "quacks", when sick and also are subjected to violence at various levels.

Conclusion: The findings highlight to the policy makers and implementation partners that health care and other socio-economic need of the SHG programme is integrated as a part of the overall design. Convergent approaches are important to have the best results.

**Keywords:** Self Help Groups (SHG), access to health care, women's empowerment

## 1 Introduction

Microcredit can be traced back to the early 20th Century with the Co-operative Credit Society's Act, 1904. Later in Bangladesh, microfinance was pioneered by Dr. Mohammad Yunus through his brainchild Grameen Bank of Bangladesh in 1975. It was primarily to provide access to finance through loan and saving services for the poor with particular focus on women. Small groups of ten to twenty women were formed into SHGs based on the principles of 'self-help'. Women saved through these SHGs and in turn funded their loans. However, beyond the fundamental thrift and credit, the key driver for enabling the poor people to access finance and banking services was nonfinancial support that the members received as training (Rmanamma and Reddy, 2013)[i]. The first SHG was formed in India in 1985 and since then several important initiatives has been taken by National Bank for Agriculture and Rural Development (NABARD), the Reserve Bank of India (RBI) and leading NGOs or multinational agencies. SHG Bank Linkage programme evolved to be included in the Government of India's annual plan for 2000-01, as the key strategy to mitigate poverty in the country. Since then, it has been persistently part of the nation's annual plan for poverty alleviation (Fernandez, 2007)[ii].


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Diving deeper, Mayoux (2000) highlighted, the "three paradigms" of economic empowerment, poverty alleviation, and the feminist paradigm to reflect on the individual empowerment of women. This was catalyzed through the process of collectivization induced with the participation in SHGs. Mayoux analysed that economic empowerment is facilitated through training and capacity building for increasing income through livelihood or micro-enterprise development. This reduces the vulnerability of the poor and improves the status of women at the household, organisational and macro level[iii].

To analyse the impact at the individual level, ILO (2007) in its report referred to a range of studies. It emerged that women invested their income on children's education, particularly for girls, improved health and nutrition practices and contributed to the environment positively through support to renewable energy systems and green jobs[iv]. Littlefield E., Morduch J. and Hashemi S. (2003)[v] analysed the ways in which women's ability to make decisions evolves through their engagement with microfinance services.

Similar assertions have been reflected through studies that indicated that the women in SHGs could improve their ability to make choices as they could challenge the gender norms and culture Swain and Wallentin (2009)[vi]. Singh (2004) indicated that in addition to helping families financially the members of SHGs have also steered democratic decentralized governance driving sustainable growth and equity in their community through participation in governance, NGO partnership and empowerment through community based organisations[vii]. Brody and Hoop, (2015) highlighted several factors or pathways have been indicated as determinants of the women's participation in SHGs; their ability to manage finances, make decisions, and their cohesiveness and interconnectedness within the community-based stakeholders. The study additionally highlights that the participation further reduces the risk of exposure to domestic violence in the long run for SHG members[viii].

However, the above assertions regarding the level of empowerment through SHGs have been challenged by other studies. Rajendran and Raja (2011) summarizes that participation in SHGs led to more political empowerment than economic empowerment and rather weak contribution towards social empowerment of women[ix]. Further detailing on the poor social empowerment, Kumar (2006) highlights that the entire focus of SHGs is its economic function of savings and credit, thus limited success is experienced in eliminating poverty and facilitating empowerment of women. The need for emphasis on involvement of men and decentralization of health services was felt as participation of women in SHGs did not improve their consciousness on health aspects.[x].

Mohindra & Haddad (2007) reflects that while SHG programmes were not designed to create any health impact, they however has led to the improvement of the health of poor women and their immediate communities. This is due to various factors such as "autonomy" and "access to resources" that was analysed using Michael Grossman's health production theory [xi]. Panchani (2014) reinforces on the gender disparity and poor status of women in the country that remains a significant barrier for women from achieving their health rights. She further reinforces that the access to basic primary health care depends on the role of women in facilitating health awareness that in turn empowers them to serve their communities[xii].

To further analyse the prospect of SHG in facilitating health awareness, Mohanty, et al (2020) examines an integrated microfinance and health literacy program through the various factors that enable women to continue her membership in a group. The analysis revealed that the continuation of women from the poorest background as members does not reflect their readiness to borrow for any reason including health. More often than not they do not continue as they are skeptical about their ability to repay and adhere to their group norms. The 'moderately poor' remain as members of the group as there is a greater propensity of women taking loans from the group for economic reasons including that of health. The study clearly reflects the need for such programmes to take a more inclusive approach to include the poorest to arrest multi-dimensional poverty[xiii].

To further address the issue of poverty, since June 2011, the National Rural Livelihood Mission was operationalised by Government of India aided by the World Bank with a mission of, "creating efficient and effective institutional platforms of the rural poor, enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services". The intent of this programme was to include women from various socio economic intersections, to work on a common purpose and train to manage the SHG. This facilitated livelihood generation, empowerment of women and their awareness of rights and entitlements[xiv]. The World Bank (2020) highlights that under the programme Government of India supports 67 million SHGs of poor women operational in 28 states and 6 union territories with 1.4 billion USD savings and leveraged 37 million USD


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in loans. Since then, the movement has grown across the country but it has particularly grown in Southern and Eastern states that reflected an association with reduction in poverty too (Sinha and Navin, EPW, 2021)[xv].

IMF (2018) predicted that India will be the fastest growing large economy in the world in the coming years and is the world's third largest economy measured in purchasing power parity (PPP) terms[xvi]. However, the global rank of India in gender equality fell from 87th in 2016

(0.683) to 112th in 2020 (0.668) and further to 140th in 2021 (0.625) amongst 153 countries as per the Global Gender Gap Report (WEF)[xvii]. It ranks 155th amongst 156 countries with respect to health and survival as per the Global Gender Gap Report (WEF, 2021) which is particularly due to the skewed sex ratio at birth (916, MOSPI, 2015-17)[xviii]. Further, NFHS IV consolidates the continuing challenges with respect to gender equality and the health status of women; reflected through several indicators such as low levels of literacy, persistence of early marriage, low access to health checkup at the pre-natal stage, low intake of iron and folic acid during pregnancy, prevalence of anemia, and exposure to spousal violence. Poor status of women reflects the poor status of access to health facilities for children that is evident through the high infant mortality rate, low levels of complete immunization, and knowledge and practice on positive nutritional practices such as complementary feeding[xix].

The potential of SHGs in empowering women in improving their health, that of their children and their families have been indicated by Saggurti N, Atmavilas Y (2018). The study reflected that participatory behavior change communication facilitated by trained health workers on maternal and child health through women SHGs emerged as an effective community based approach to reach out to the most vulnerable women in rural India[xx]. Amongst other determinants of participation in SHGs, mobility was identified as a factor that impacted women's awareness of their own health (S. Hemavathy Nithyanandhana, Norman,2017[xxi]). The relationship between gender equality and health has been emphasized by researchers (Sörlin, A et al 2011[xxii]), and it is challenging to achieve health coverage in the country without it. Special emphasis on relationship of higher income and access to health care has been established, especially in the context of the presence of SHG in a village. Saha, Annear, Pathak, (2013) highlighted the need for understanding the advantages of the collaboration between functionaries of public health and community based organisations such as SHGs [xxiii] . There is a need for further building the evidence of this relationship between SHG and the access to health care services in order to strengthen health care services in unmet areas (Nayar KR, 2004[xxiv]).

## 2. Objective of the study

In view of the above context, a comparative study between functional and non-functional SHGs[xxv] was conducted with the objective to understand if financial empowerment leads to overall empowerment of women and access to health care for women. It intends to specifically focus on the relationship between participation in SHGs and its impact on access to health care services such as institutional delivery, antenatal care, and reporting of violence.

This paper will focus on the journey of women in SHGs to establish their participation and relationship with a range of variables such as; their understanding and knowledge of health care needs of self and family, particularly children, and the facilities and services to be accessed in this regard. This study recommends a framework for empowerment and health access using the SHG platform.

## 3. Methodology

### 3.1 Study Area:

The study on participation of women in SHGs and their socio-economic empowerment and access to health through SHGs was conducted in Sunderbans (a large delta spread across Eastern India and Bangladesh) covering two revenue districts of West Bengal, North 24 Parganas and South 24 Parganas. The mangrove forest of the Sunderbans is world's largest halophytic formation. The area consists of a large number of islands across a dispersed landscape with several water bodies such as creeks and canals, tidal rivers that isolate the islands from the mainland leading to poor communication that impacts the residents. Gender discrimination is prevalent in the region. Women work harder for food and livelihood as they have limited control over assets and income. This is further reflected in their inadequate representation in decision making, subordinate position in family and continual experience of violence[xxvi].


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Sil, 2016 highlights health and education do not often emerge as a priority for the people in the region due to their daily life challenges (HDR South 24 Parganas, 2009). The distribution of health facilities is not uniform across the islands resulting in higher morbidity compared to the state average[xxvii]. Kanjilal (2010) highlights the risk of children to contract respiratory and other communicable diseases and the proximity to the mangrove forest leads the population to live under the threat of animal attacks or snakebites[xxviii].

In addition to the landscape, the geographical vulnerability due to frequent exposure to natural disasters makes it challenging to access basic facilities including health care and nutrition. The devastation caused by the tropical cyclone Aila in 2009 further worsened the challenges with nutrition support emerging as an urgent need for the population. Panda et al, 2016, through their investigation assessed the importance from the larger perspective of changing environment and health vulnerability in the region, focusing on women and children. The findings reflected high levels of malnutrition with low weight and stunting amongst children. One fourth of the women had low body-mass index (BMI), poor hygienic practices with a large proportion of them using water, mud/ash (not soap) to wash hands after defecation. Anemia prevalence in women in all the villages was above 40%, highlighting a severe public health situation[xxix].

With reference to the vulnerabilities of the women in the region with respect to their economic and social status, health situation and overall gender equality, two island blocks each were chosen in the districts of South 24 Parganas and North 24 Parganas for the study.

### 3.2 Study Design:

An exploratory study design has been used to test the theory of change to understand the levels of empowerment and their access to health facilities and their health seeking behavior. The two cases for comparison included: Case 1: Non- functional SHGs run under a government programme and having members aged 19 to 49 years, Case 2: Functional SHGs having members aged 19 to 49 years. The study was conducted using mixed methods including both Quantitative (semi-structured interview tool) and Qualitative approaches (Focus Group Discussions, In-depth Interview and Case Studies and Observation). The quantitative methods enabled quantitative analysis of association between participation in SHGs and empowerment. While the qualitative methods helped in exploring the social and process related dynamics of functioning of SHGs and empowerment of women.

Multi Stage Probability Sampling method was used for drawing the sample of 234 women specifically to cover the key target groups from members of functional (116) and non-functional (118) and 130 SHG members for FGD (4 functional groups 4 non-functional groups in each Panchayat area) other stakeholders including male family members (60), Federation leaders Panchayat members, NGOs, Frontline Health Workers.

Descriptive statistics was used to draw the findings on the four measures: i. general profile of respondent, which includes social profile, economic status, ii. Participation in the SHG groups, iii. Empowerment of members through participation and iv. SHG women and access to Health Care services. The Measures of association (Cross Tabs, Chi-square, and z test) was used to see the association of different measures with functional status of SHGs. Binary logistic regression was applied to predict the outcome variables (empowerment of members with respect to decision making, awareness about importance health issues, access to health care, domestic violence, etc.) on the basis of functional status of SHGs.

## 4. Findings

### 4.1 The socio-economic profile

With reference to Table 1 the various parameters of the socio- economic profile of the interviewed SHG members from both functional and non- functional groups have been analysed for the variation and commonality of the membership profile of both category groups. The age distribution across both the group categories is fairly uniform with a larger number of members concentrated in the age group of 31- 40 years age (47.9%). This is also confirmed by the mean age that emerges to be almost the same at 35.7 years with a standard deviation of ±7.13, reflecting minimal variation. The religious distribution highlights that there is a larger number of Hindu SHG members (85.9%). It emerged during discussion that initially it was challenging to form SHGs with women from minority communities; however targeted mobilization had helped to include more women from the community into the


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SHG movement. The distribution between the social groups reveals that the SHGs represent higher proportion of members from backward communities (60%). The break up reflects that higher representation of members from Scheduled Caste (SC) (44%), followed by Other Backward Castes (OBC) (9%) and Scheduled Tribes (ST) (6.4%). This represents a greater emphasis of encouraging women from backward communities to join the movement. However, there is significant variation in their representation between the functional and non- functional groups. Members of General caste category are more in functional groups (50.9%) as compared to (29.7.2%) non-functional groups. There is more representation of SC and ST members are in non-functional groups (52.5% SCs, 3% STs) as compared to functional groups (36.2 % SC, 3.2% ST). Qualitative interactions with local stakeholders substantiated that it was more difficult for members from more disadvantaged social groups to join and continue in functional groups as they are unable to cope with the SHG operations and norms. The education level of members indicates that there is significant variation within the two group categories. The functional groups have 16.4% of its members who have never been to school as compared to 30.5% of the non- functional group members. Members of functional groups have more women having education above secondary level (51.7%) as compared to non-functional group members (37.3%).

Women from non-functional groups emerged to be poorer with 80.5% of the respondent in the Below Poverty Line (BPL) category as compared to 68.1% from functional groups. More number of women from non- functional groups are in the lower income group with 92% earning below Rs 3000 [1 USD (US Dollars) = 74.5 INR (Indian Rupee) as on 3rd July 2021] compared to 81.7% of the functional group members. With the limitations of livelihood opportunities in the region, women are mostly engaged in agriculture (36.3%) or livestock rearing, 32.9% are daily wage earners or labourers, 6.4% are engaged in the service sector, 3% having small businesses or enterprise and 21.4% are engaged in domestic work. 21.2% members from non- functional groups were landless as compared to 15.5% from functional groups.

The variation is living condition is reflected through the nature of the household in which they live. Higher percentage of women from non-functional groups live in *kachcha* (temporary) house (74.6%) as compared to members of functional group (62.9%). The variation between the functioning and non- functioning groups was found to be significant with 91.4% of the former having their own bank accounts compared to only 77% of the non- functional group members. Similarly, more women have accessed credit from some source in last 5 years are more from functional groups. Poorer members from more disadvantaged communities are more likely to slip into more non-functional groups.

**Table 1 Socio- economic profile of the respondents**

| **Group Categories** | **Functional SHG** | | **Non-functional SHG** | | **Total** | |
|---|---|---|---|---|---|---|
| | **Number** | **Percent** | **Number** | **Percent** | **Number** | **Percent** |
| **Age** | | | | | | |
| Upto 30 years | 37 | 31.9% | 28 | 23.7% | 65 | 27.8% |
| 31-40 years | 52 | 44.8% | 60 | 50.8% | 112 | 47.9% |
| Above 40 years | 27 | 23.3% | 30 | 25.4% | 57 | 24.4% |
| Mean Age | 35.5 (SD ±7.13) | | 35.9 (SD ±7.15) | | 35.7 (SD ±7.13) | |
| **Religion** | | | | | | |
| Hindu | 100 | 86.2% | 101 | 85.6% | 201 | 85.9% |
| Muslim | 15 | 12.9% | 16 | 13.6% | 31 | 13.2% |
| Christian/others | 1 | 0.9% | 1 | 0.8% | 2 | 0.9% |
| **Social Group** | | | | | | |
| General | 59 | 50.9% | 35 | 29.7% | 94 | 40.2% |
| SC | 42 | 36.2% | 62 | 52.5% | 104 | 44.4% |
| ST | 4 | 3.4% | 11 | 9.3% | 15 | 6.4% |
| Other backward castes | 11 | 9.5% | 10 | 8.5% | 21 | 9.0% |
| **Marital status** | | | | | | |


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| Group Categories | Functional SHG | | Non-functional SHG | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Currently married | 113 | 97.4% | 109 | 92.4% | 222 | 94.9% |
| Widowed | 3 | 2.6% | 4 | 3.4% | 7 | 3.0% |
| Divorced/ Separated | 0 | 0.0% | 1 | 0.8% | 1 | 0.4% |
| Never married | 0 | 0.0% | 4 | 3.4% | 4 | 1.7% |
| **Education Status** | | | | | | |
| Never been school | 19 | 16.4% | 36 | 30.5% | 55 | 23.5% |
| Primary | 37 | 31.9% | 38 | 32.2% | 75 | 32.1% |
| Secondary | 29 | 25.0% | 30 | 25.4% | 59 | 25.2% |
| Hr. Secondary + | 31 | 26.7% | 14 | 11.9% | 45 | 19.2% |
| **APL/BPL** | | | | | | |
| APL | 37 | 31.9% | 23 | 19.5% | 60 | 25.6% |
| BPL | 79 | 68.1% | 95 | 80.5% | 174 | 74.4% |
| **Income** | | | | | | |
| <1000 | 67 | 68.4% | 60 | 65.9% | 127 | 67.2% |
| 1000-3000 | 13 | 13.3% | 24 | 26.4% | 37 | 19.6% |
| >3000 | 18 | 18.4% | 7 | 7.7% | 25 | 13.2% |
| **Occupation** | | | | | | |
| Agriculture/ livestock | 37 | 31.9% | 48 | 40.7% | 85 | 36.3% |
| Labourer | 37 | 31.9% | 40 | 33.9% | 77 | 32.9% |
| Service | 10 | 8.6% | 5 | 4.2% | 15 | 6.4% |
| Business | 5 | 4.3% | 2 | 1.7% | 7 | 3.0% |
| Domestic work | 27 | 23.3% | 23 | 19.5% | 50 | 21.4% |
| **Nature of House** | | | | | | |
| *Kachcha* | 73 | 62.9% | 88 | 74.6% | 161 | 68.8% |
| *Pakka* | 30 | 25.9% | 13 | 11.0% | 43 | 18.4% |
| *Semi-pakka* | 13 | 11.2% | 17 | 14.4% | 30 | 12.8% |
| **Having Bank Account** | | | | | | |
| Yes | 106 | 91.4% | 91 | 77.1% | 197 | 84.2% |
| No | 10 | 8.6% | 27 | 22.9% | 37 | 15.8% |
| **Taken Credit in last 5 years** | | | | | | |


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| Group Categories | Functional SHG | | Non-functional SHG | | Total | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Yes | 100 | 86.2% | 86 | 72.9% | 186 | 79.5% |
| No | 16 | 13.8% | 32 | 27.1% | 48 | 20.5% |

*Note:*Significant at <.05 level; **Significant at <.005 level.*

### 4.2 Nature of participation in SHG and access to finance

The nature of engagement of the functional group (116 respondents) has been analyzed to find that most of the groups existed for over 4 years (76%). The neighbors, friends and other SHG members were the prime motivators for getting the respondents to join the group and the primary reason for joining the group was access to credit (75.9%) along with the ability to save (16.4%).The frequency of the meetings also emerged as a strong catalyst in making the group functional, active and cohesive; with 77.6% of the members meeting at least once a week or more, while 91% of the respondent members reported that first priority of discussion was given to access to credit, second was importance of saving. Additionally, they discussed a range of social issues which included health and nutrition of family (35%), water and sanitation (25%), education of children (21%). Discussion with stakeholders reinforced that the range of things discussed within a group meeting is often instrumental in shaping the views and understanding of rural women in SHGs about their own rights and about their own and family's wellbeing.

With respect to women's access to finance, the analysis revealed that majority of groups have circulated (including savings and credit) an amount ranging from 1 to 3 lakh INR (36.2%), 18.1% members have managed less than 1 lakh INR and only 8.6 % have managed funds over 4 lakhs. A similar trend was reflected with 38.9% groups who have already disbursed Rs 1 lakh or more as loan within the group, 32.8% members reporting a loan distribution of less than a lakh, there were also 28.5% groups who did not avail any loan. With further analysis it is revealed that 4.3 % members have taken loan of over a lakh, 9.5% have taken INR 50000 to 1 lakh and most members have taken loans below INR 25000 ( 56% ). The reason for taking loan, as expressed were diverse that covered women utlising the loan for agricultural investment (20%), to set up some small businesses (18%), invested in buying animals or poultry (4.8%) as livestock rearing and so on. 19% of the members took the loan for self or family's health and treatment. A positive trend of women in functional groups to have repaid the loan amount completely or partially (96.3%) though there is a fear of inability to re-pay the loan remains with the women. It emerged during the FGDs with women that that lack of opportunity in the delta region also instills fear of repayment which discourages many women from taking any loan from the group. The scope of trainings organized by the Federation or other state level bodies was reported, however these were sporadic trainings and was not uniform for all groups. There are some trainings organized by local NGOs on livelihood or human rights that too was not equally distributed and rather concentrated in the large inner islands.

### 4.3 Empowerment and consciousness of health rights

During the study, women were asked if they have a defined set of rights that they can access. Within the functional group members, 75% responded positively to having knowledge of rights for women as compared to 53.4% of the other group. The z test, P-value (.001<.05) reflects a significant relationship between the variables. This can be linked to the limited exposure to education and also the age of members where such knowledge is limited. Right to health care and nutrition was acknowledged by 25.9% functional group members and 9.3% from members of non-functioning groups, further establishing a significant relationship with this variable with the functionality of the group.

Overall, when women were asked if their decision making has improved post their membership in SHGs, 74.1% members of the functional group responded positively as against 56.8% members of the non-functional groups. On health related decisions, 62.1% women from active, functional groups were found to take decisions for self and 69.8 % members decide for other family members as compared to 48.3% members of non -functional groups who took decision for self and 57.6% for their family members. The vibrancy and confidence were visible in the members of the active functional groups, during discussion with members of active groups and the male members of their families. This transformation amongst women of active SHGs was acknowledged as contributing factor towards harmony at home.


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### 4.4 Experience of domestic violence

Moreno and Watts (2011) described violence against women as "perhaps the most shameful human rights violation, and the most pervasive." The paper referred to the WHO study (2005) highlighting the need for building evidence on the negative impact of violence on health and overall development of women[xxx]. Sarkar (2010) in another study conducted in the state amongst over hundred adults and adolescent women found 23.4% to be exposed to violence[xxxi]. Similar trend was found in the study area with 36% of the women from SHG groups experiencing violence. Nature of violence experienced by women from both functional and non- functional groups include physical violence at home (82% non-functional groups, 70% functional groups), violence outside home (11% non-functional group, 0% functional group), mental violence at home (58% non- functional groups, 49% functional groups) and small percentage members of both groups who experienced mental and sexual violence outside home.

The results of binary logistics regression (Table 2.) corroborates the finding stated above, that more members of the functional groups do not think violence is acceptable. The odds ratios also show that the women in functional SHGs are around 35% less likely to have experienced violence, however this relationship does not appear to be statistically significant (with sig >.05). Although violence is experience by SHG members in both categories yet, a strong relationship has been reflected between functional SHGs and women's ability to take action against this violence. The finding reinforces the trend of the functional SHGs initiating social action to intervene when there is a case of violence in the community. The odds ratio reflects those members of a functional SHG are 1.89 times more likely to take action when there is case of violence. There is also a significant relationship (with sig at .000) between the functional status of SHGs and its probability of taking action in case of violence in the community. The calculated odds ratio suggests that there is around 3 times higher chance for a functional SHG to take action when they identify a case of violence within the community in comparison to a non-functional group. Thus, it establishes a strong role of active participation of women in functional SHGs and contributing to the lives of rural women by participating in the process of empowering and protecting themselves and other women in the community.

**Table 2: Binary Logistics Regression to assess relationship between the Functional Status of SHGs and experiences of Violence and concerning actions taken by self and SHG**

| Variables | B | S.E. | Sig. | Odds Ratio | 95% C.I. | |
|---|---|---|---|---|---|---|
| | | | | | Lower | Upper |
| Women thinking alright for women to be beaten | -1.248 | .530 | .019 | .287 | .102 | .812 |
| Women experiencing violence | -.442 | .270 | .102 | .643 | .379 | 1.092 |
| Women taking action in case of violence | .641 | .283 | .024 | 1.898 | 1.089 | 3.307 |
| SHG play role in violence cases | 1.160 | .273 | .000 | 3.191 | 1.869 | 5.447 |

*Note: Reference category = Non-functional SHGs*

### 4.5 Importance of women's health

Inspite of challenges of the geography, the exposure to SHGs, their economic empowerment and an overall focus on health system improvement in the country through implementation of programmes such as National Health Mission have improved access of women to health care, as indicated by local men and SHG members during the FGDs. However there is a variance when asked if taking care of one's own health was considered important by the members with 99.1 % of the functional group members have responded positively to the question as compared to 89.8% members of non-functional group. The variation through chi-square test has had a p-value of .007 (<.05) highlighting a significant relation between the two variables and the functionality of the SHGs.

**Essential aspects of health care as perceived by women respondents** reveal a difference across a range of health seeking behaviors amongst women. 67.2% members from functional groups as compared to members of non-functional groups (89.8%), have agreed that eating well and a balanced diet is very essential for themselves. The calculated P- value of .001 (<.05) depicts a significant relationship between women's participation in SHGs and


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association with its perceived need for their own health. Interestingly, 38% respondent women interviewed have considered enough rest and sleep as very essential elements of their health (44% functional, 33.9% non-functional). The z-test with the p-value being .012 shows significant relationship between the two variables. Access to medicines or diagnostics when needed has also been indicated as a requirement by 62.6% women in functional groups as compared to 41.0% women in non-functional groups has a significant relationship ( z test with p-value as .001<.05).

**Table 3: Perception of women regarding importance of health issues**

| | Functional SHGs | | Non-functional SHGs | | |
|---|---|---|---|---|---|
| **Issues** | **Number** | **Percent** | **Number** | **Percent** | **P-value** |
| Women believing that it is important to take care of health | 115 | 99.1% | 106 | 89.8% | .027* |
| **Women Believing the following health issue is "very essential":** | | | | | |
| Eating well and a balanced diet | 78 | 67.2% | 51 | 43.2% | .000* |
| Enough rest and sleep | 51 | 44.0% | 40 | 33.9% | .012* |
| Life free from violence | 82 | 71.9% | 67 | 56.8% | .027 |
| Limited stress | 38 | 32.8% | 30 | 25.4% | .215 |
| Ability to visit a doctor when not well | 62 | 53.4% | 56 | 47.5% | .357 |
| Access to medicines or diagnostics when required | 72 | 62.6% | 48 | 41.0% | .001* |

*Note: *z-test p-value significant at <05 level.*

**4.5 Awareness on maternal and child health needs**

The analysis compiled in Table 4 aims to assess the level of awareness of SHG members from both categories on specific areas of maternal health, child health and nutrition parameters. 81.9% women from functional groups and 70.3% women from non-functional groups mentioned that they were aware that rest and balanced diet is important for pregnant women. Acquiring a Mother and Child Protection Card from the health worker has been considered to be important by 93.1% women in functional groups as compared to 78.8% of members of the non- functional groups. A significant relationship has been found through chi-square test with a P-value of 0.15 (<.05). Consumption of iron and folic acid is considered to be essential for women in functional groups with 80.2% responding positively as against 58.5% of the women in the non-functional groups. Here too a significant relationship between the two variables exists; with a chi-square test generating a P-value of .002 (<.005). Institutional delivery is considered essential for pregnant woman by 93.1% of the members from functional groups and 74.6% members from non- functional groups. The chi square test reflected a significant relationship between the views on institutional delivery and active participation in SHGs with a P- value of .002 (<.005). This fact can also be corroborated with the socio-economic profile of the SHG members that reveal women from poorer, disadvantaged and less educated background slip into the non-functional groups and also have limited knowledge of critical health needs of women.

Responses of SHG members on the essential needs for their children's health and nutrition are compiled in Table 4. The responses indicated 97.4% of members from functional groups considered exclusive breast feeding essential for children until 6 months age as compared to 87.3% of members from non-functional groups. This significant relationship is evident with the p- value of .015 (. <.05) through chi-square test between the two variables. Similarly, the need for adequate balanced diet after completion of 6 months was considered essential by 75.9% of the active SHG group members as compared to 51.7% of respondents from non- functional groups. The significance of the comparison between these two variables have been analysed using chi-square resulting in a P value of .000 (<.005). The functional group members validated the need for completion of immunization and need of trained child specialist/pediatrician when in any crisis. The relationship has been further reinforced with a chi-square test for immunization ( P- value of .009 <.05) and for need of child specialist and pediatrician (P-value at .000 <.05).


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**Table 4: Awareness about the importance of maternal and child health issues**

| Health Issues | Functional SHGs | | Non-functional SHGs | | |
|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Chi-sq. P-value |
| **Women considering issues "very essential" for Pregnant Women** | | | | | |
| Regular rest and balanced nutritious diet | 95 | 81.9% | 83 | 70.3% | .149 |
| Acquiring a Mother Child Protection Card | 108 | 93.1% | 93 | 78.8% | .015* |
| Consumption of iron- folic acid supplements | 93 | 80.2% | 69 | 58.5% | .002* |
| Monthly check up at the local health centre/ ANM | 100 | 86.2% | 87 | 73.7% | .112 |
| Ultrasonography | 68 | 58.6% | 61 | 51.7% | .714 |
| Institutional delivery | 108 | 93.1% | 88 | 74.6% | .002* |
| Prevention from accident and violence | 91 | 79.1% | 92 | 78.0% | .722 |
| **Women considering issues "very essential" for Children** | | | | | |
| Exclusive breast feeding until 6 months of age | 113 | 97.4% | 103 | 87.3% | .015* |
| Adequate balanced diet after completion of 6 months | 88 | 75.9% | 61 | 51.7% | .000* |
| Complete and timely immunisation | 112 | 96.6% | 100 | 84.7% | .009* |
| Consulting a trained child specialist/ pediatrician when in any crisis | 101 | 87.1% | 77 | 65.3% | .000* |
| Hygiene and cleanliness to be maintained at all times | 98 | 84.5% | 93 | 78.8% | .302 |
| Height and weight of your child | 84 | 72.4% | 72 | 61.0% | .106 |

*Note: *p-value significant at <05 level.*

Affinity of both groups towards, non-formal or unregistered medical practitioners in the village, referred as quacks[xxxii] is similar, with both groups displaying high degree of awareness of quacks, in addition to other alterative medicines and Primary Health Centre. The women of SHGs, in distant locations of delta region mentioned, "We depend mostly on our local doctors (referring to quacks as no registered practitioners available in the island), if there is any need, we also talk to ASHA didi[xxxiii] for delivery cases, who help women to reach the nearby hospitals, we don't know all the locations. We have barely gone anywhere beyond our islands". However, some women and men discussed during FGDs in a remote island that, "earlier many of the women would die during or after child birth due to inaccessibility, now at least we have a boat ambulance for such support".

### 4.6 Various parameters of access to health care

Health and wellbeing of the women and their family, particularly children, have been considered as an important variable in assessing empowerment of the women. The relationship between the functional status of SHGs and health related indicators is assessed using binary logistics regression. The Table 5 shows significant relationship between various parameters of positive health seeking behavior and functionality of SHGs such as, women seeking treatment from institutional or professional service providers for last suffered ailment (sig. 007<.05), last delivery


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held in an institution (sig .000<.05), women's ability to take decision about their own health (sig. 002 <.05) and women knowing ANM[xxxiv]/ ASHA and AWW[xxxv] of their area (sig.15<.05). The odds ratio indicates that women in functional groups are 2 times more likely to seek treatment from an institutional facility or a professional (for last ailment), 3 times more likely to have delivered the last child in an institution and 2 times more likely to have taken a decision about their own heath. The women in functional SHGs are also 3 times more likely to know their local health workers as compared to women in non-functional groups. The analysis suggests that if women in SHGs are active, functional and are informed then their attitude and behavior towards health care will improve, thereby improving their own and family's health status. The qualitative interactions reveal the close coordination between the frontline health workers and functional SHGs, the discussion on health issues in the group meetings and involvement of SHGs by Federation and Panchayat in local development activities. This may have contributed to this strong relationship between the variables of access to health and SHG functioning.

**Table 5: Binary Logistics Regression to assess relationship between the Functional Status of SHGs and Access to Health care**

| | B | S.E. | Sig. | Odds Ratio | 95% C.I. | |
|---|---|---|---|---|---|---|
| | | | | | Lower | Upper |
| Women sought treatment from health institution/professional for last ailment | .842 | .310 | .007 | 2.320 | 1.264 | 4.258 |
| Last delivery held in Institution | 1.158 | .295 | .000 | 3.182 | 1.784 | 5.676 |
| Women take "self" decision about her own health | .858 | .273 | .002 | 2.358 | 1.381 | 4.025 |
| Women knowing ANM/AWW/ASHA of their area | 1.194 | .491 | .015 | 3.300 | 1.260 | 8.643 |

*Note: Reference category = Non-functional SHGs*

## 5. Discussion

The Self-Help Groups emerged as a perfect response for various low and middle income countries to address challenges of poverty alleviation, empowerment of women and their access to a range of social services. It is a grassroot level institution designed to safeguard the interest of the poor (Myroux, 2000[xxxvi], Galab 2003[xxxvii], World Bank 1995[xxxviii], 2020[xxxix]). Fundamental to the existence of the SHGs was empowerment of women though access to finance and contribution to the collective development process of women in their SHGs, which in turn enabled women members to improve their status, decision making ability, access to health facilities, and overall wellbeing (Rai & Devadasan, 2019[xl], Batliwala 2007[xli]). Hoop, Brody et al (2019[xlii]) highlighted the need of training and integration with other programmes such as health care for better impact of SHGs.

Although recognizing the potential of access to micro credit for rural poor, Basu (2008) cautions from creating a 'hype' over its impact on poverty alleviation or women's empowerment. She argues that micro credit is also a process, as without enabling the poor to effectively utilize the available resources to sustain and expand their livelihood options; SHGs would not have the desired results. It has emerged that women's empowerment through micro credit at the household level is often not about negotiating gender roles but about enhanced status and improved gender relations at all levels due to mobility, access to finance and improved communication[xliii].

Evidence shows that women empowerment has a profound influence on the use of health services that could be linked to reproductive health outcomes (Blank AK, 2001[xliv]). Mainuddin AKM, Begum A.H, (2015) highlight the multidimensionality of women's empowerment and health seeking behavior that indicates the lack of enough studies to explore the complexity of the relationship between the two elements[xlv]. There are studies that reflect on the relation of improved knowledge and awareness on health issues of women using the SHG platform (Narasimha B.C., Anand et al, 2016[xlvi]). Participatory behavior change communication on maternal and child health (MNCH) with SHGs appears to be an effective community-based approach in which trained community health workers facilitate the process (Saggurti N, Atmavilas Y, 2018), thereby underlining the need for the two programmes (MNCH and SHG) to interact[xlvii].


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The poor status of maternal health and nutrition in India is perpetuated due to deep rooted poverty, gender discrimination and illiteracy despite several interventions undertaken by the government. Torture and violence faced by women in domesticity is also a related factor for poor maternal health (Kowsalya, Manoharan, 2017[xlviii]). Hence it becomes imperative that a rapidly growing agency of women, through the SHGs in India (World Bank, 2020) is further studied across its key components to bridge the evidence gap with respect to its impact on reproductive health in the household and women's autonomy (Gugerty et al, 2019[xlix], Hoop Brody, 2019[l]).

The current study located in the vulnerable terrains of Sunderban delta region of West Bengal has also experienced a growth in the SHG movement. Sunderban is one of the most backward areas of the state due to its large mangrove forestland which presents climatic and geographical challenges causing vulnerability and poverty for the residents (WWF, 2015)[li]. Similar to many rural areas of the country, quality health care is often inaccessible in the delta region (Vadrevu, Kumar, Kanjilal, 2015)[lii], reinforcing the serious issue of poor health of women and children in the area. There is a high preference for home delivery and dependence on unskilled health personnel (Burman, Vadrevu, Vyas, 2016)[liii]due to which pre- and post-natal heath needs are adequately addressed. This is aligned to the limited provision for maternal health facilities that were not equitably accessible to the disadvantaged populations in the remote pockets of the geography (Vadrevu, Kanjilal et al, 2016)[liv].

The mixed methods study was conducted covering primarily women through semi structured interview and group discussions to draw comparison between the functional and non-functional SHGs in the region to reflect on its impact on empowerment and health care access. Qualitative interactions with other stakeholders such as male members of SHGs, frontline health workers, panchayat leaders and bank officials helped build on the understanding and the relationship between the variables internal and external to the programme. The study establishes the view that there is a significant association of women's active participation in SHGs, their overall empowerment, their knowledge of and access to health care facilities.

The functionality of the groups was embedded in women's active participation in group meetings, financial transactions through thrift and credit, interaction with health workers and other development actors in the community aligned to similar studies undertaken in region (Banerjee, Dutta, 2013[lv], Sorlin 2011[lvi]).The findings also demonstrate that often, the less poor, less marginalized, literate and more matured women are part of the active functional groups. They are significantly better at prioritizing their own health, taking health related decisions for self, with more proactive contact with health workers. However, unless cultural and normative concerns around deep rooted gender inequality are addressed, the holistic impact of SHGs on health will remain limited in achieving its desired target (Kumar, 2007[lvii] Kumar 2006[lviii]).

There is an opportunity to effectively utilize the existing SHG platform to achieve better health outcomes for the women members and their families. This can be achieved through engagement of rural women in thrift and credit activities, participation in social campaigns, dissemination of knowledge on health care needs, and prioritization of women and children's health and their nutritional needs. Although it must be acknowledged that there are areas of continuing challenge due to normative, structural and community-based barriers and thus not always dependent on functionality of SHG, which may require evidence backed innovative solutions. Such challenges include women's exposure to continuing violence (Sarkar 2010[lix], Jejeebhoy, KG Santhya, 2018[lx]), access to formal health facility (Sil, 2016[lxi]), limited knowledge of nutrition needs for self and children (Sadhu, Panda, 2016[lxii]) and continuing affinity towards informal health service providers such as the, 'quacks' (Dutta, 2013[lxiii]).

A shift in women members' critical health seeking behavior has been experienced with the enhanced participation in SHGs and with interventions such as health and nutrition awareness activities, discussion on health issues in the meetings, interaction with frontline health workers, ability to take loan for health reasons for self and family. This is reflected in their choice of delivering in an institution, taking decision for their own health, seeking help from professionally qualified health care professionals or registered health institutions.

Therefore, significant scope to make, micro, meso and macro level interventions to further leverage the SHG platform to improve women's access to health care facilities has emerged through this study. There are recommendations from the study. Firstly, it is important to formally converge the departmental efforts through national programmes towards ensuring women's access to health and nutritional care, strengthen women's voices against public health crisis such as violence while facilitating access to finance to holistically empower women. Programmes such as National Health Mission, National Nutrition Mission, National Rural Livelihood Mission need


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to consolidate their interventions to achieve the maximum impact on women at the community level. Secondly, instead of limiting SHG performance assessment to financial indicators it is imperative to integrate social development outcomes and indicators to prioritize interventions to contribute to deeper change in the lives and status of women. Thirdly, more community driven and need based strategies are to be formulated that would target on the poorest of the poor women. These strategies would need to transcend the existing barriers of class, caste and religion to be truly transformative for women's empowerment, health and wellbeing.

## 6. Conclusion

With this research an effort has been made to share the various elements of the functionality of SHGs and its impact on a range of variables, especially focusing on women's empowerment towards their access to basic health care facilities. This was aimed for the practitioners and the policy makers to have insights on the key aspects of functionality and its overall impact on women. This study reinforces that becoming members of SHGs is a critical stepping stone for poor rural women to access their health rights, although in order to bring about deep-rooted social transformation, a more equitable, inclusive, convergent, and consistent approach to policy and programming is required that bridges over caste, class, economic and religious barriers.

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