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# Methodology:

An observational cross-sectional study was carried out at Presidency University in Kolkata, West Bengal, India, with a primary focus on academic investigation. Participation in the study was entirely voluntary, with no financial incentives offered for the time provided. Informed written consent was obtained from all participants prior to conducting interviews. Those participants unfamiliar with the benefits of the Swasthya Saathi scheme were informed about its provisions and offered guidance for any related inquiries.

**Sample Size Calculation:** The sample size was determined to be 129 participants, selected through a systematic random sampling method to ensure representativeness.

**Inclusion Criteria:** Individuals who had experienced a hospitalization, either personally or through someone they knew, within the past six months and were knowledgeable about the Swasthya Saathi scheme were eligible for inclusion.

**Exclusion Criteria:** Individuals who declined to provide personal information or did not consent to participate were excluded from the study.

## Swasthya Sathi Scheme:

The "Swasthya Sathi" scheme was officially introduced by the government through Cabinet Notification No. 2625 on February 17, 2016, followed by a notification from the Finance Department under No. 1104-F (P) on February 25, 2016. To ensure effective implementation and smooth functioning of the scheme, a State-Level Implementation Committee (SLIC) was established, led by the Chief Secretary, which oversees all aspects of the scheme's operations. Furthermore, a registered society called the "Swasthya Sathi Samiti" (Registration No. S/M/4377 of 2016-2017, dated November 15, 2016) was created to monitor the scheme. The program was officially launched by the Hon'ble Chief Minister on December 30, 2016, marking the beginning of its mission to provide healthcare support to citizens.

## **Main Features of the Scheme:**

Coverage: Provides basic healtl	n cover for	secondary an	nd tertiary care	e up to Rs.
5 lakh per family per year.				

#### □ Rollout Timeline:

- Started on 01.02.2017 with National Insurance Company covering 9 districts and United India Insurance Company covering 11 districts until 28.02.2018.
- Assurance mode for March 2018.
- From 01.04.2018 to 15.01.2020, Bajaj Allianz covered 18 districts, and IFFCO TOKYO covered 5 districts until 31.12.2019, later extended to 15.01.2020.

#### ☐ Current Insurance Partners (from 16.01.2020):

- National Insurance Company: 6 districts (Cluster-I)
- Oriental Insurance Company: 9 districts (Cluster-II)
- United India Insurance Company: 8 districts (Cluster-III)

### ☐ Scheme Features:

- Paperless, Cashless, Smart Card-based system.
- No limit on family size; covers parents from both spouses and dependent physically challenged family members.
- Includes all pre-existing diseases.
- Entire premium is paid by the State Government; beneficiaries contribute nothing.

#### ☐ Smart Card and Enrolment:

 An online Swasthya Sathi Smart Card is issued at enrolment, capturing family details, photographs, biometrics, address, mobile number, and SECC ID. The scheme is managed entirely on an IT platform.

### ☐ Hospital and Claim Management:

- Online empanelment and grading of hospitals based on infrastructure and services.
- Pre-authorization is 100% online, with a turnaround time of 24 hours.
- Real-time e-health record uploads at discharge.
- Hospital claims are reimbursed within 30 days; interest applies for delayed payments.

# **Research objective:**

### ☐ Assess Healthcare Accessibility:

• Evaluate how the Swasthya Sathi Scheme has affected access to healthcare services for beneficiary households.

### ■ Measure Financial Security:

 Analyse the scheme's impact on reducing healthcare expenses and financial burden for families.

### ☐ Evaluate Overall Well-being:

 Assess improvements in overall well-being and health outcomes among scheme beneficiaries.

### □ Determine Beneficiary Satisfaction:

 Gauge satisfaction levels with the Swasthya Sathi Scheme among the surveyed households.

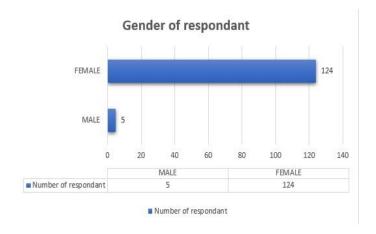
#### □ Evaluate Awareness and Utilization:

 Understand the level of awareness about the scheme's benefits and the extent of utilization across different demographic groups (men and women).

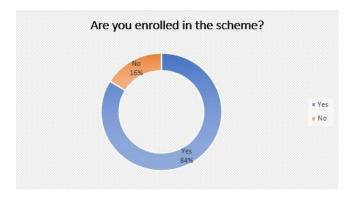
# Personal profile:

A personal profile typically includes several key aspects that together provide a holistic view of an individual's background and current status.

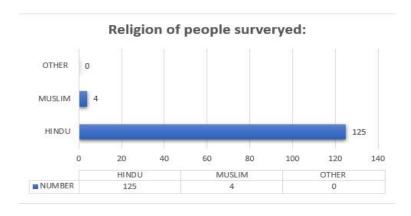
The first of these is **gender**, which provides foundational information about the individual's identity and can be relevant in a range of contexts, from workplace policies to social programs that may cater to specific needs or rights based on gender.



The survey was mostly done to women rather than men. When asked about their enrolment status, approximately 84% of the candidates reported being enrolled in the Swasthya Sathi scheme, while the remaining 16% indicated they were not enrolled. This high rate of enrolment reflects significant participation in the scheme, with only a small portion of individuals not covered.



Among the enrolled candidates, we can find a certain homogeneity in terms of religion of the candidates. Out of 129 people surveyed, we found that 125 people belong to the Hindu religion as compared to 4 Muslims, with no people from any other religion. Thus, the scheme had actually succeeded in its outreach to the Hindu communities whereas it had failed miserably in its outreach to Muslim, along with other communities.

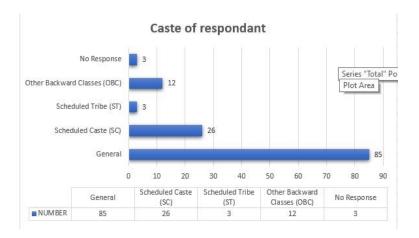


We have also done a LOGIT test to find out whether you're more likely to enroll in the scheme if you're Hindu or not. The result is given below:

Logistic re	egressio	n		Number of	obs =	129
				LR chi2(1)	=	2.54
				Prob > chi2	=	0.1113
Log likelil	hood =	-56.042921		Pseudo R2	=	0.0221
e1	Coef.	Std. Err.	Z	P>z	[95% Conf.	Interval]
<b>p4</b>						
Muslim	-1.719	1.030566	-1.67	0.095	-3.738872	0.300871
_cons	1.719	0.2491296	6.9	0.000	1.230715	2.207285

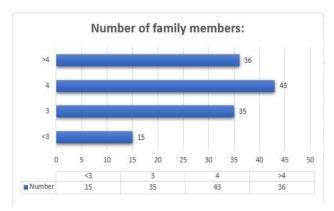
Here, we have taken Hindu as a reference category. We find that in comparison to Hindu, if someone is a Muslim, their chances of enrolment to Swasthya Sathi Scheme decreases by approximately 1.719 units.

Among the Hindu communities, we find that generals have the highest share of enrolment in the scheme, (around 85), followed by Scheduled Caste (around 26), with lowest coming from scheduled tribes (only 3).

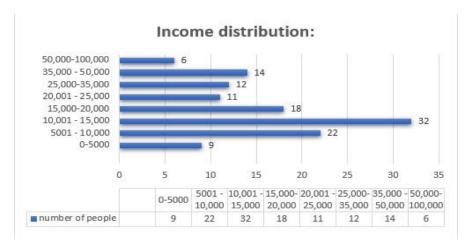


High enrolments among general community suggests that this scheme had not succeeded in being inclusive to all social groups. The benefits of the scheme had been reaped by the general caste and not the actual marginalised social groups- namely SC, ST and OBC.





Among the candidates, in terms of marital status, married candidates have a higher share than unmarried candidates. The beneficiary of the schemes has overwhelmingly been the married ones. Also, most of the candidate are from joint family (with 4 or more members). This way we can say, the scheme can ease the burden of the head of the family regarding their health insurance and provide a safe cover.



The majority of beneficiaries of the scheme fall within the income group of ₹10,000 to ₹15,000, indicating a strong uptake among individuals with lower earnings. Enrolment from higher-income brackets, such as those earning between ₹50,000 and ₹1,00,000, is minimal, reflecting limited participation from wealthier groups. Additionally, those with incomes in the ₹15,000 to ₹20,000 range also represent a significant portion of the enrolees. Overall, the scheme primarily attracts people from poorer to lower middle-class backgrounds, highlighting its appeal to individuals with limited financial means seeking accessible support.

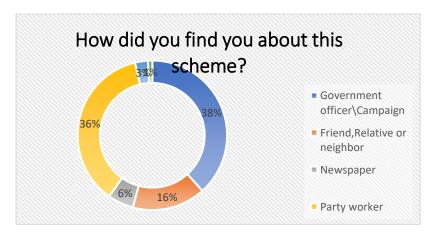
Logistic regression		Number of obs	112
		LR chi2(6)	17.91
		Prob > chi2	0.0065
Log likelihood = -42.042672	!	Pseudo R2	0.1756
e1 Coef.	Std. Err.	z P>z	[95% Conf. Interval]
p11			
5001 - 10,000 1.791759	1.300183	1.38 0.168	7565527 4.340072
10,001 - 15,000 1.015921	1.005322	1.01 0.312	9544752 2.986316
15,000-20,000 1.58045	1.304485	1.21 0.226	9762929 4.137194
20,001 - 25,0002719337	1.049376	-0.26 0.796	-2.328673 1.784806
25,000-35,000 0	(empty)		
35,000 - 50,0006649763	0.976713	-0.68 0.496	-2.579299 1.249346
50,000-100,000 -1.94591	1.180194	-1.65 0.099	-4.259047 .367227
_cons 1.252763	0.8017837	1.56 0.118	3187043 2.82423

The results of the logistic regression (LOGIT) analysis indicate that income level has a varying effect on the likelihood of enrolment in the scheme. For individuals in the ₹5,000–₹10,000 income category, their likelihood of enrolment increases by 1.79 units, suggesting a positive association between lower income and enrolment, although this increase is not statistically significant at the 10% level. Conversely,

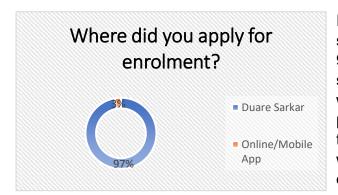
individuals in the higher income group of ₹50,000–₹1,00,000 have a decreased likelihood of enrolment by 1.94 units, and this negative association is significant at the 10% level. All other income categories, however, do not show statistically significant effects on enrolment at the 10% significance level.

## **ENROLMENT:**

Our survey revealed that approximately 38% of respondents learned about the scheme through government campaigns, while 36% were informed by party workers associated with the ruling government. This underscores the prevalent belief in the ruling party's effectiveness and the role of public institutions in facilitating widespread enrolment in the scheme.

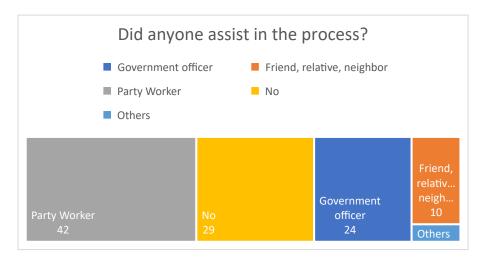


The ruling government has implemented a highly successful enrolment scheme that has seen a remarkable uptake from the general population. Through a strategic combination of government officers, and ground party workers, the government has been able to sign up a significant proportion of citizens into the Swasthya Sathi scheme.



In the process of enrolment, a significant majority, approximately 97%, sought enrolment in the scheme through DUARE SARKAR, while merely 3% utilized online platforms. This disparity underscores the adequate online infrastructure within the public healthcare department.

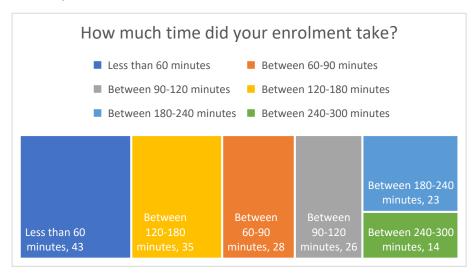
During the enrolment process, approximately 39% of candidates received assistance from party workers, while around 27% reported no assistance. Additionally, when inquired about support from government officials, roughly 22% acknowledged receiving help from them.

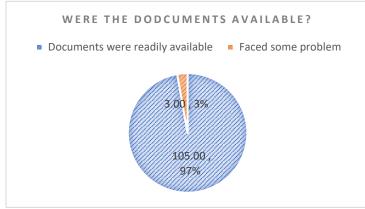


A significant number of individuals did not receive any assistance, which may indicate one of two possibilities: either these individuals possess sufficient skills to manage independently, or there is a deficiency of state officials present in the field.

Regarding the time of the enrolment process of an individual, we found out that, for 25.44% it took less than one hour. While, 20%, it took around 2 to 3 hours. 16.56% of the respondents say that it took them around 1 to 1.5 hours in total.

The responses are as follows:





Around 97% of the people had all the necessary documents readily available with them during the enrolment process for this scheme, against 3% of the candidates who failed in providing the documents.

After the enrolment process, around 91% of the candidates received the card within 5 months. Only 4% of the people's card took around 5 to 10 months and 5% of the people had to wait more than 10 months to receive the card.

The efficiency of the current administration can be reflected from the above data.



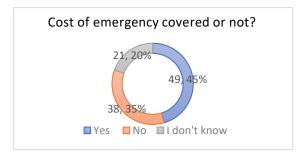
Around 91% of the people received the card in less than 5 months while only 9% of the people received the card after 5 months – 4% (5 to 10 months) and 5% (more than 10 months). The administration was quick to provide the insurance to the needy.

## Awareness assessment of the masses:

In this section, we study the general awareness of the people who enrolled in the Swasthya Sathi scheme. They were asked few questions regarding the benefits of the scheme, and their responses were noted.

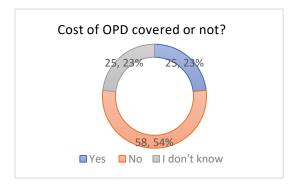


Around 29% of the people think that the travelling expenses are covered under the scheme against 29% who said 'no' and 30% who don't know about it.

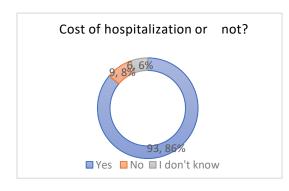


Around 45% of the people believe that the cost of emergency will be covered under the scheme against 35% of the people who said 'no'.

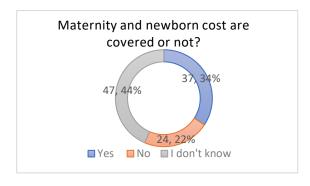
Here, also, we find 20% of the people who are not sure of it.



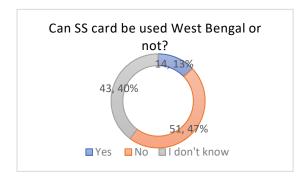
This is interesting. Around 54% of the people believe that the cost of OPD is not covered whereas 23% of the people said 'yes'. The share of people who said 'yes' and 'not sure' are identical.



In the case of hospitalization, 86% of the people believe that the cost will be covered. But there are around 8% people who thinks otherwise, along with 6% of the people who are not sure.



In terms of maternity and newborn cost, 34% of the people believe the cost will be covered, against 22% who said 'no' and a significant 44% people not sure.



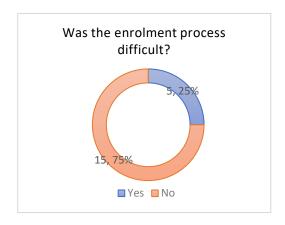
Around 47% of the people believe the SSA card can't be used in other states and Union territories. Here, around 40% of the people are not sure about it, along with 13% who thinks the card can be used outside West Bengal.

What we find is, most of the people are not aware of the benefits of the scheme properly. Certain things, they know but regarding most of the things either they are confused or straightaway said 'no'. This reflects the poor communication from the side of the government in reaching out to the public and making them aware of their full benefits and not part of it.

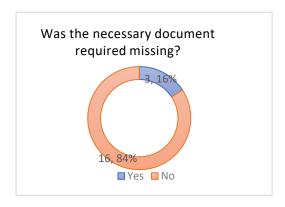
Beneficiaries need to educated properly regarding the benefits with no complacency.

## Reasons for not enrolment for the scheme:

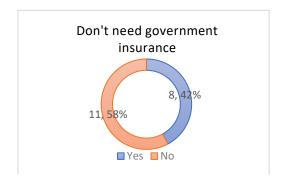
For the people who have not enrolled, we had asked them various questions and the responses are as follows:



Around 25% of the people said the process was difficult to enroll against 75% who believed it was not.



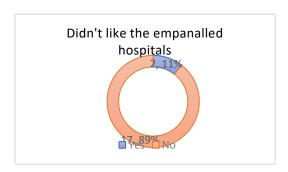
Around 84% of the people had necessary documents present to enroll in the Swasthya Sathi Scheme, against 16% of the people for whom the documents were missing.



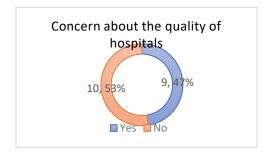
Here, we get an interesting data. Around 42% of the people don't need government insurance against 58% who wanted government insurance but didn't enroll.



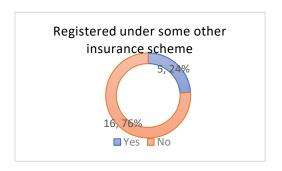
Here, also we find around 32% of the people said the scheme didn't include the doctors or the hospitals they usually visit, against 68%, who had no such problems.



89% of the people had no problems with the empaneled hospitals under the scheme.



Around 47% of the people raised question about the quality of the hospitals under the scheme.



Even though 76% of the people were not registered under no health insurance scheme, they still didn't sign up for Swasthya Sathi scheme.

The aforementioned statistics suggest that ultimately, it comes down to individuals' decision to enrol in the scheme or not.

From the reasons for not signing up, we are unable to draw any meaningful

conclusions about the success or failure of the government in the participation under the scheme.

Concerns have also been expressed regarding the calibre of the medical facilities provided under the program. It also makes people suspicious of hospitals and public healthcare. These could all have been factors in the decision to not join up.

# Hospitalization episode:

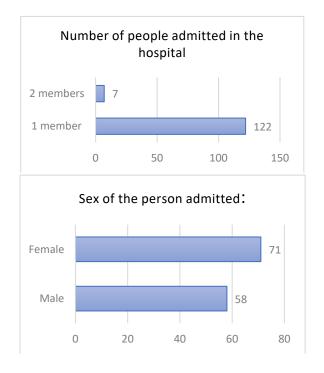
In the medical field, patient experiences frequently yield insightful information. This research explores a survey in which respondents discussed their recent hospitalization experiences, including their opinions on comfort levels, contact with medical staff, post-discharge support, and the quality of medical care.

By identifying both areas of strength and room for growth, this section sought to provide a thorough understanding of the experience's patients had upon being admitted to hospital or someone close to them.

Healthcare professionals and legislators may better address service shortages, guarantee a more patient-centred approach, and ultimately improve future patients' hospitalization experiences by examining these firsthand stories.

This section outlines the survey's hospitalization episode and offers insights that can contribute to more compassionate and effective understanding of the scheme as well as insurance as a whole.

Regarding the candidate's last hospitalization episode, we found out certain information:

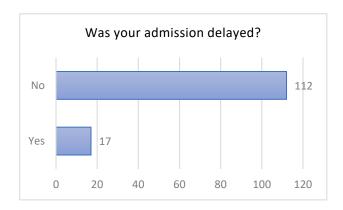


Around 122 candidates said only one member of the family was hospitalized in the last two years against 7 candidates for whom the number was 2.

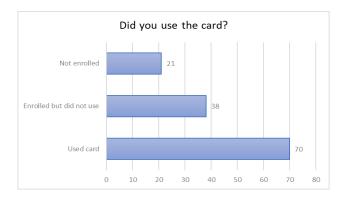
Here, the distribution of male and female are quite comparative. Male member hospitalized were 58 in number of responses while female member was 71.



In the case of 52 people, hospitalization period lasted less than 5 days, followed by 5 to 10 days for 41 candidates and 10 to 20 days for 26 candidates. Only in 3 cases, it lasted more than a month.



For 122 candidates the admission process was not delayed, against 17 people for whom it was delayed.



There were 70 people who used the card, 38 people who were enrolled but did not use the card and 21 people were not even enrolled.

In terms of services like admission process, treatment process, care taken by the doctors and nurse and release process, we asked the candidates to rate their overall experience.

More than 50% of the people rated the services 'Good' while only handful people rated 'Bad'. Rest all said 'Okay'.



We can also find out whether having the SSA card would have resulted any difference in the following services or not.

Kruskal-Wallis equality-of-populations	rank test
hs1 Obs Rank Sum	
-	
1 70 4617.00	
2 59 3768.00	
chi-squared = 0.100 with 1 d.f.	
probability = 0.7515	
chi-squared with ties = 0.137 with	1 d.f.
probability = 0.7113	

We accept the null hypothesis since the probability (0.7113) is not significant at 10% level.

Kruskal-Wallis equality-of-populations	rank test
hs1 Obs Rank Sum	
-	
1 70 4360.50	
2 59 4024.50	
chi-squared = 0.803 with 1 d.f.	
probability = 0.3703	
chi-squared with ties = 1.346 with	1 d.f.
probability = 0.2460	

We accept the null hypothesis since the probability (0.2460) is not significant at 10% level.

Kruskal-Wallis equality-of-populations	rank test
hs1 Obs Rank Sum	
-	
1 70 4605.00	
2 59 3780.00	
chi-squared = 0.068 with 1 d.f.	
probability = 0.7948	
chi-squared with ties = 0.129 with	1 d.f.
probability = 0.7194	

We accept the null hypothesis since the probability (0.7194) is not significant at 10% level.

Kruskal-Wallis equality-of-populations	rank test	
hs1 Obs Rank Sum		
-		
1 70 4607.00		
2 59 3778.00		
chi-squared = 0.073 with 1 d.f.		
probability = 0.7875		
chi-squared with ties = 0.112 with	1 d.f.	
probability = 0.7378		

We accept the null hypothesis since the probability (0.7378) is not significant at 10% level.

Kruskal-Wallis equality-of-populations	rank test	
hs1 Obs Rank Sum		
-		
1 70 4575.50		
2 59 3809.50		
chi-squared = 0.015 with 1 d.f.		
probability = 0.9040		
chi-squared with ties = 0.019 with	1 d.f.	
probability = 0.8890		

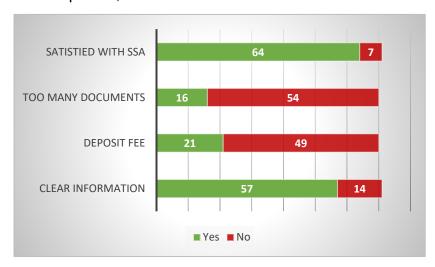
We accept the null hypothesis since the probability (0.8890) is not significant at 10% level.

Kruskal-Wallis equality-of-populations	rank test
hs1 Obs Rank Sum	
-	
1 70 4399.00	
2 59 3986.00	
chi-squared = 0.510 with 1 d.f.	
probability = 0.4753	
chi-squared with ties = 0.771 with	1 d.f.
probability = 0.3800	

We accept the null hypothesis since the probability (0.3800) is not significant at 10% level.

Thus, we find no difference in ratings of the services between the group who used the SSA card and did not used the SSA card.

Regarding people who used SSA card, they were asked certain question about their hospitalization episode;



In terms of satisfaction with SSA card, more than 50% of the candidates are satisfied. Only 16 people were asked too many documents during the admission process whereas rest 54 were not. Only 21 people (less than 50%) were asked to pay a deposit fee during the admission process. All the 57 people were given clear and sufficient information before the admission process.

Regarding their overall experience with hospitalization using SSA card are as follows;

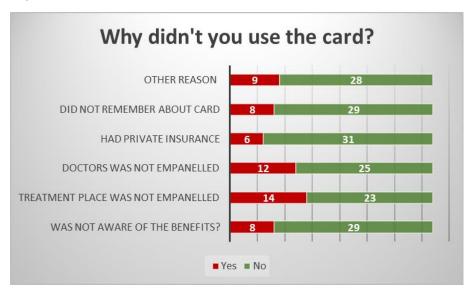


We find most of them rated the services 'Good' to 'Okay'. Only handful people rated it 'Bad'.

Around 39 people were highly satisfied with level of financial assistance from SSA, 37 people were highly satisfied empanelment of doctors, 38 people were highly satisfied with coverage of hospital bill and 31 people were highly satisfied with the information provided to them regarding their treatment.

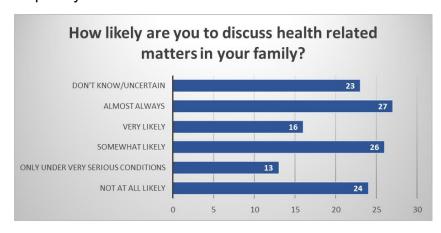
For people who didn't use their enrolled SSA card, the reasons are as follows:

Most of the people had no concrete reason for not using the SSA card. For example, when people were asked whether they forgot about their card or not, around 29 people said 'No', they didn't forget. Even though people (around 31) had no private insurance, they still didn't use the SSA card. Two of the major reason which became significant whether to use the card or not, were the doctors and the hospitals, who were empaneled under the scheme or not.



Like here, around 12 people, said that, they didn't use the card because the doctors to whom they prefer going was not empaneled and 14 people stated their preferential hospital was/were not empaneled.

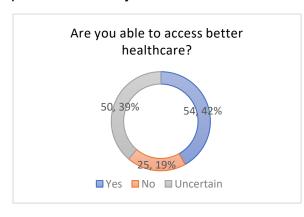
Lastly, to conclude the report on a note whether people's health status improved or not we asked them whether they discuss health related matters in their family frequently or not.



Significant amount of people are likely to discuss about their health status in their family. Around 27 people said, they always discuss health related issues, followed by 26 people, who are somewhat likely to discuss.

Here, also, we find a significant portion of people (24 people), who are not at all likely to discuss such things. When the reason was asked, they stated it can traumatic, or can elevate anxiety or can cause stress.

Finally, in regard to access to better healthcare facilities after having SSA card, they responded variously.



Around 42% respondents, said that they are able to access better healthcare, whereas, 39% denied such claims. We found 19% of the people were uncertain regarding access to better healthcare.

## **Conclusion:**

The findings of this study indicate that, although a majority of respondents possessed a general familiarity with the Swasthya Sathi Medical Insurance Scheme, many were not fully utilizing its benefits, primarily due to a lack of precise information regarding the scheme's provisions. The analysis identified a statistically significant relationship between accurate awareness of the scheme and both enrolment rates and levels of patient satisfaction following service utilization. To effectively address the disparity between awareness and utilization, the study suggests the implementation of robust Information, Education, and Communication (IEC) strategies. These strategies should incorporate mass media campaigns, the active participation of frontline healthcare personnel, and the prominent dissemination of Swasthya Sathi information through signage in public health institutions. Additionally, enhancing the operational capacity of hospital helpdesks is imperative to provide beneficiaries with timely support and facilitate seamless access to the scheme's services.

# **Appendix:**

#### Logit test:

In Stata, the logit command is used to estimate binary logistic regression models, particularly suited for analysing dichotomous (binary) outcome variables.

#### Kruskal-Wallis test:

The Kruskal-Wallis test is a non-parametric statistical method used to compare the distributions of a continuous or ordinal dependent variable across three or more independent groups.

Here, a significance level of 10% (p  $\leq$  0.10) was employed for statistical testing, reflecting the relatively small sample size of 129 observations. This more **relaxed threshold** was deemed appropriate to address the inherent reduction in statistical power associated with **smaller samples**. By adopting this criterion, the study aims to strike a balance between minimizing the risk of Type II errors—failing to identify true effects—and ensuring the validity of the inferences drawn regarding the relationships between the variables under investigation.