Women's Health and Financial Stability in India.

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1. <u>Abstract</u>

This paper studies the relationship between women's health and financial stability in India. It will try to understand how access to a bank account can influence the presence of long term morbidities such as cataract, BP, TB, Heart Disease, Diabetes, Cancer, Asthma or Leprosy in women in a rural context-specific to women. Logit analysis will be conducted on the IHDS II data from 2011-12 to arrive at the results. Logit analysis model, through the means of margins at means and odds ratio. A positive relation was found between owning a bank account and a women's health. Factors such as ownership of capital, decision making, membership in a savings group and other demographic models such as caste and marital status were also studied in relation to financial independence on health. Such a study is crucial to understanding the gender gap women face in a social and economic context. The conclusion of such a study will be beneficial for health policies and the conduction of financial literacy drives. These implications will result in the overall economic growth of the country's. An interesting finding was the impact on the nature of health insurance on a women's health independent of her financial status.

Keywords: Financial Stability, Morbidity, Women's Health, Bank Ownership

2. <u>Introduction</u>

Societies worldwide have been laced with gender inequality for centuries. It is a challenge for women to access even fundamental rights of healthcare and education. UNICEF reported that "nearly 1 in 4 girls between the ages of 15 and 19 are neither employed nor educated – compared to 1 in 10 boys'. Women in India face an added layer of adversities to this gender gap. A study conducted by UNICEF showed that India is the only large country where more females die than males. An important concept to understand is that women's equality has become necessary for a nation's economic, social, and political development.

Empowering Women is smart economics. To understand this statement, we first need to define what is meant by women's empowerment. Women's Empowerment is a movement striving to achieve gender equality across various aspects of economic and social life. It is simply the holistic improvement of a female's life. Such a movement can positively impact a countries' economy by contributing to the workforce. In India, women make up 48% of the population, but only 20% were a part of the labour force in 2020. There exists so much untapped potential, with around 40% of India's human resources absent in the labour market due to societal biases against women. Many countries have been proactively bridging their gender gap, while India lacks. According to the Gender Gap report of 2020, India was ranked 112 among 153 in the gender gap index.

Women's empowerment is a dynamic concept that links economic, political, and societal values. The intersectionality of these topics will help widen the scope of women's issues in India and lead to an in-depth understanding of the root causes of gender-based discrimination. With more studies and research comes awareness and eventually empowerment. Two very interesting aspects are financial and physical health and how they are inter related. Financial health refers to the state and stability of an individual's finances, it can be understood as a person's ability to build wealth, manage expenses, prepare for financial insecurities and even recover from them and secure wages to afford daily living.

Conventionally, it is the male of the family who should earn a living by working while the women have to take care of the household. The World Bank estimates that India has one of the lowest female labour participation. But by encouraging women to work and earn their income, they can slowly start to take care of their own finance and provide for themselves. Even if women earn their own money and capital, their ability to access them plays a role in determining their financial stability. As per the National Family Survey conducted in 2015-16, only 53% of all women had a bank account that they ran independently. Women should be able to access their finances without any mediation from their husbands. Doing so only increases her efficiency but also her relative power in society. This empowerment can manifest in various beneficial ways, such as better health, literacy rates, and long-term production (Fletchner and Kenney,2011).

Women in rural India also struggle when it comes to accessing their capital. The most valuable capital asset that can secure an individual's financial stability is land ownership. India has had extremely patriarchal values attached to the inheritance of property. Only in 1956, the Indian constitution declares that daughters have an equal right to their father's property. Despite this change in trends, there is still a long way to go; only 43.3% of women had any property ownership, according to the NHFS-5 in 2015-16.

However, the story of women's financial stability doesn't end with employment and access to financial institutions. In 2014, The Pradhan Mantri Jan Dhan Yojana opened up 36 crore bank accounts in India – with 50% of these holders being women. Yet despite these efforts to increase accessibility, the demand-side efforts were minimal. That is, women rarely use these services. This shines the light on the importance of financial literacy. Women need to be taught basic concepts like savings, deposits, and loans to take advantage of the institutions at their disposal to secure their own financial stability.

Physical health goes hand-in-hand with financial health and is just as important in fighting gender inequality. A women's health is a reliable indicator of an entire family's health. This is crucial information for legislatures who then need to figure out health laws to maintain a healthy population and the economic gains that come with it. It simply boils down to a healthy population, an efficient population. This paper would like to draw the lines between these important aspects of financial stability on a women's health. It has major implications for the country's policymaking and overall economic growth. Closing the gender gap is one of the overarching visions set by the UN in its goal to achieve inclusive and sustainable development. Hence it is essential to study the relationship between financial and physical health to realize these goals.

Therefore this paper tries to understand the dependence of a women's health on her financial stability. Based on existing policies, the accessibility to bank accounts is a policy extensively implemented by the government, "owning a bank account under one's name" will be the proxy for financial stability. Most of the previous studies mentioned were conducted on a global level. The implications could be different in a rural context-specific to India. Indian women face numerous other social and economic adversities in rural areas. They tend to be more securitized and stripped of their autonomy decision-making abilities.

3. <u>Literature Review</u>

Most studies have classified financial health and stability outside of the physical and mental health realm. Usually, definitions of financial stability do not incorporate one's physical health, even though recent studies have shown specific ties to the two (Bialowolski et al). Formally defining, the Center for Financial Services Innovation states that cash flows and spending, among moderate-income families and other financial habits is what is used to measure their financial stability and health. The ideology here is that financial health can be gauged by the day-day, monthly management of expenses by an individual, and the financial independence they have to make decisions to enjoy their life. However, this definition is extremely narrow as it does not account for physical or mental health. The lack of a broader definition has limited the opportunities in the interdisciplinary studies that could help solve the issues of the gender gap in financial and physical health (Weida et al., 2020).

Developing countries are more susceptible to face health and well-being issues due to increasing financial stress.cA research was conducted to study these implications in India, Ghana, China, and Russia. The data was conclusive in indicating a population with low self-reported health and life satisfaction due to the prevalence of non-communicable diseases in the sample group (Huang et al., 2020). A similar by Bialowolski et al. (2021) found that exercising financial autonomy increased well-being. This paper used data on individuals' savings and found a positive relationship with emotional and physical well-being by observing positive improvements in blood-test results. A practical application of this theory concluded that those with better savings have limited smoking habits and participate in physical sports.

A cross-sectional analysis was conducted between women's cardiovascular health and her financial strain index for women in the US. The financial strain index was the summation of 6 different self-reported measures of stress. First, it was observed that women who reported at least one strain were younger, less educated, and had a lower income than those who did not even report a single stressor. Obesity, hypertension, and diabetes were more relevant in women with 2 or more stressors than those with no financial strain. 61% of women who had troubles paying their bills reported 3 or more financial stressors. On further analysis, the increase in the number of financial stressors was empirically associated with a decrease in the likelihood of having intermediate cardiovascular health (Cabeza De Baca et al., 2019).

Owning a bank account acts as a proxy for financial health. Previous studies have been conducted to understand the relationship between bank ownership and a women's financial inclusion. The world gender gap report found that over 40% of women in the world have a more limited access to banks and financial institutions compared to their male counterparts. This inequality is even more apparent in India with a rank of 142 out of 149 in the gender quality index of opportunity and economic participation. One aspect, India has been prioritising is financial inclusion through bank accounts, which are a more accessible form than other micro financial institutions. The Pradhan Mantri Jan-Dhan Yojana (PMJDY) was one initiative launched by the government of India that aimed at providing every individual bank account with mobile banking. This program was targeted mainly towards women and rural poor who are the sections of society who were the most vulnerable to infant and maternal morbidities due to a lack in maternal health services and low reproductive health (Singh et al).

Education also ties into the health and well-being of individuals. In order to be able to live healthy lives and maintain a standard quality of life, individuals need to be educated. Only with a certain degree of education comes the knowledge on how to prevent morbidities or sickness and cure it. According to the Global Education Monitoring Report publishes by UNESCO, improved nutrition and vaccination rates were seen in children with educated mothers. Higher mother's education also came with lower maternal mortality, child deaths and HIV. The report concluded that education is a catalyst to economic development through the means of health intervention (UNESCO). Dunbar's study found that those women who were financially stable had higher levels of sexual health. If a woman lacks nutrition and healthcare, it can be transferred onto their children and hinder their mental and physical development (Dunbar, 2011).

Women's awareness of what constituted appropriate healthcare was one major factor impacting their engagement in household health decision-making. Many research have highlighted the link between women's knowledge and their utilisation of health care. Studies in Ethiopia, Bangladesh, and Burkina Faso, for example, indicated that intervention programmes targeted at increasing women's awareness of pregnancy danger indicators improved the likelihood of them using facility-based deliveries (Hailu et al.)

A study was conducted in 2017 in Indonesia on women to understand the effects of a women's decision making power in a household on her maternal health. Maternal mortality in Indonesia has remained high, with an estimated 305 deaths per 100,000 live births. The paper concluded that a women's decision making autonomy had played a crucial role in determining the use of pre-natal care services. Women who had more autonomy had a 1.7 (95 percent confidence interval) higher chance of receiving adequate prenatal care. The paper was also able to conclude that women's authority over household assets influenced their reproductive health care decisions (Rizkianti et al.)

Lastly, Caste which a very important determinant of an individual's social status will have a significant impact on their access to healthcare facilities. A study was conducted in rural India, using a cross-sectional household survey, age-adjusted percentages and odds ratios, and multilevel multinomial logistic regression model to test the hypothesis that low caste and socioeconomic level are linked to a worsened reported health status. Women from lower castes (SC/ST)) and other backward castes (OBC) showed higher rates of poor health than women from socially benefiting castes. Regardless of education, women's work status, or household landholdings, socioeconomic inequalities were detected in health (Mohindra et al.)

4. <u>Research Question & Hypothesis</u>

Is a women's health influenced by her financial situation in India? If so, to what extent?

a) Is a woman who has a bank account, access to this capital, and other beneficial financial traits healthier than the women who don't?

b) Does financial literacy lead to better health in women?

I hypothesize that a women's health is dependent on her financial stability. Those women who own a bank account will tend to be more healthier, that is, they are less likely to have long term morbidities. Taking into consideration other control variables, women who have decision making autonomy at home, in this study, if they are able to access healthcare services without seeking permission, are more likely to be healthier. In additional , financial stability of a women is looked at in terms of 'if she own capital as either land or livestock or if she is a member of a savings group. I hypothesize that those who have capital and are a member of the savings group will tend to have a better health. However, controlling for other socio-economic conditions such as age, education, caste, and marital status, I presume that older, less educated women, who are married or from a socially backward caste are more likely to have long term morbidity. Insurance has also been included in the model, and my prediction is that regardless of the type of insurance, private or public, those who have one are less likely to have morbidities.

In past literature, there have been studies to identify a link between financial stability and physical health. However, papers have mostly looked at how a woman's health was affected by a financial crisis, independent of their own financial status. Additionally, most of these studies have focused on developed countries and have also been extremely broad as they have identified the trend for all women in general. Developed countries have very different characteristics and hence different implications for the same themes. Such broad studies will not be beneficial for practical application in policymaking in India as we have many constraints that are limited to India. Financial stability for women in a small village in India could differ from what it means for rural women in Germany.

Studies so far have not focused on the ownership of a bank account to physical health. There have been papers that have looked at the relationship between mental health and the ownership of a bank account. This is the gap in the literature that my paper will try and cover. Hence my paper will try and focus on its view and understand the link between financial stability and health for rural women in India.

5. <u>Methodology</u>

5.1 <u>Data Source</u>

To conduct this research, the Indian Development Survey (IHDS) data set was used. Funded by the National Institute for Health, this survey focused to collect information on topics concerning employment, health, education, marriage and social capital in India. IHDS is a multi-topic survey that is nationally representative of 42,152 households in 1,503 villages and 971 urban neighbourhoods in India. This data set consists of two waves, for simplicity I will analyse data from the second wave collected in 2011-12. There is an 85% reinterview rate from the first wave collected in 2004-05. Such a survey permits analysis on a wide range of social and economic issues.

The IHDS-II master data further split into 14 data sets. For my study I will be merging DS1, DS2 and DS3 which pertains to data on Individual, Households and Eligible women respectively.

5.2 <u>Data Description & Descriptive Statistics</u>

My main Dependent variable will be 'Has a major morbidity', In this case the ones who have been cured will be recoded to 'No' as they are currently not ill. My main independent variable will be 'has a bank account'. Considering the context of the sample space and a thorough literature review, this is the most accurate representation of financial stability of rural women. Some of the other dependent variables are no of children, migration status of household members, income, job, education and etc. My study will be focusing on women between the ages of 15-64 as these are the working ages of women in India. It also sufficiently covers the age of potential mothers, this is an important consideration as it determines the quality of the future human resources.

To be able to conduct this research, three data sets; individual set, household set and the eligible women data from IHDS-2 were merged together. The household data set contains 42,152 observations, the individual data set has 204,569 observations and the eligible women has 39,523 observations. First the one to many merging was used to combine the individual and household data using IDHH, which is the unique code given to each household. Further, one on one merging was used to add the eligible women data using IDPERSON which is the unique code given to each individual.

The main Y variables, to measure the health of the individual uses the variables that collects data an individual has a long term morbidity or not. A binary variable was constructed *Morbidity.* The variable is coded as 1 if the individual has any one of the long term morbidities; Cataract, Tuberculosis, High BP, Heart Disease, Leprosy, Cancer, Asthma, Polio, Paralysis or Epilepsy. The main X variable *OwnBank* explains if the respondent's name is on the bank account or not, which acts as a proxy for financial stability. Other variables have been chosen as controls for *Morbidity* based on the literature read.

Education level, Age, Gender and Caste are general socio-economic descriptive variable that can have an impact on the presence of morbidity in women. Education level is measured in years of schooling completed and the average being 5 years of schooling. Other variables to measure the decision making power of a women and her financial stability are *HealthPerm, OwnCapital and SavingsGroup.* HealthPerm is an indicator if a women has to taker permission from other household members before accessing healthcare services. If a women is a member of a saving's group, the variable is coded as 1 and if not 0 and finally if she owns either land or livestock, the *OwnCapital* variable is coded as 1. Private and Government health insurance can measures using GovIns and PrivIns, if an individual has either the variable is coded as 1 else 0. Finally, a health control variables is *Meals* that measures the number of meals consumed by women in a day. It ranges from 1 to 6 with an average of 2.7 meals consumed per day by a woman.

Table 1: Variable Description

Variable	Code	Type	Description
Long-Term Morbidity	Morbidity	Binary	Have any long term morbidity or not = 0 if No =1 if Yes
Name on Bank Account	OwnBank	Binary	Respondent's own name on bank account =0 if No =1 if Yes
Education Level	Educ	Discrete	Years of education completed
Age	Age	Continuous	Age of the respondent in years
Gender	Sex	Binary	Gender of the respondent =0 if Male =1 if Female
Caste	Caste	Categorical	Religion or Caste of the respondent =1 if Brahmin /Forward caste =0 if OBC/ Dalit/Adivasi or Christian, Sikh, ,Jain or Muslim
No of Meals per Day	Meals	Categorical	No of meals consumed by the respondent in a day

Government Insurance	GovIns	Binary	Has government health insurance =0 if No =1 if Yes
Private Insurance	PrivIns	Binary	Has private health insurance =0 if No =1 if Yes
Marital Status	Marriage	Categorical	Marital status of respondent =0 if not married =1 if married
Ownership of Land or Livestock	OwnCapital	Binary	Whether decides to buy land =0 if no =1 if yes
Permission for Healthcare	HealthPerm	Binary	Ask permission to visit health care centre or not =0 No =1Yes
Savings Group Member	SavingGroup	Binary	Member of Credit/Saving group =0 if not a member =1 if a member

Source: Author's Own

Table 2: Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Max
Morbidity	39,479	0.0811064	0.2730019	0	1
OwnBank	27,741	0.5511697	0.4973837	0	1
Educ	39,476	5.187202	4.921372	0	16
Age	39,479	36.30277	9.816868	15	64
Meals	39,293	2.777365	0.5710799	1	6
GovIns	39,358	0.0922049	0.2893186	0	1
PrivIns	39,242	0.021584	0.1453227	0	1
HealthPerm	39,479	0.7913321	0.4063616	0	1
Marriage	39,479	0.0031662	0.0561809	0	1
OwnCapital	39,479	0.5661744	0.4956079	0	1
SavingsGroup	39,432	0.1192179	0.3240488	0	1
Caste	39,465	0.7802863	0.4140579	0	1

Source: Author's Own

6. **Empirical Model**

The benchmark model used to analyse the impact of the main X variable using control variables on the main Y variable is LMP due to the Binary nature of the main Y variable *Morbidity*. The empirical model used is:

$$Morbidity = \beta_o + \beta_1(OwnBank) + \beta_1(Educ) + \beta_2(Age) + \beta_3(Meals) + \beta_4(GovIns) + \beta_5(PrivIns) + \beta_6(HealthPerm) + \beta_7(Marriage) + \beta_8(OwnCapital) + \beta_9(SavingsGroup) + \beta_{10}(Caste) + e$$

Various tests were conducted to check for any biases in the data. Firstly, the Breusch-Pagan Test was conducted to check for Heteroskedasticity in the model. From *Appendix 1* we observe a p-value of 0.000, meaning we reject the null hypothesis that there is constant variance, at a 99% confidence interval. Hence, there exists heteroskedasticity which will be corrected using robust measures. Further, VIF test for multicollinearity and Ramsey-Reset test for omitted variable bias were conducted.

However, using a linear model like LPM would be inaccurate as the probability distribution function would contain values above 1 and below 0. LPM also does not account for the change

in marginal effects, in a linear model the change in one of the dependent variable would have the same effect on the probability of the binary variable being 1 which is not possible. Also, LPM could give negative values for variance with a chance of heteroskedasticity present in the error term. Finally, the estimated variances of errors may be negative.

Acknowledging the limitations of the LPM model, the better model to analysis the variables to understand the effects would be the Logit Model. Under the logit model, margins at means and odds ratios will be used to analyse the relationship between the chosen variables.

7. **Results**

The following table is the regression output for the benchmark LPM regression model. The table shows the p-values, R^2, adjusted R^2 and the root MSE.

Table 3: LPM Regression Output

Source	SS	df	MS			
				Number of obs	=	27,459
				F(11, 27447)	=	147.36
Model	121.678772	11	11.0617066	Prob > F	=	0.0000
Residual	2060.29836	27,447	.07506461	R-squared	=	0.0558
				Adj R-squared	=	0.0554
Total	2181.97713	27,458	.079465989	Root MSE	=	.27398

Morbidity	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
OwnBank	-.0063554	.0034396	-1.85	0.065	-.0130971	.0003863
Educ	.0011472	.0003764	3.05	0.002	.0004095	.0018849
Age	.0067862	.000185	36.69	0.000	.0064236	.0071487
Meals	.0038172	.0029137	1.31	0.190	-.0018938	.0095281
GovIns	.0047294	.0054824	0.86	0.388	-.0060164	.0154752
PrivIns	-.0254472	.0105048	-2.42	0.015	-.0460371	-.0048573
HealthPerm	-.0162885	.0040835	-3.99	0.000	-.0242924	-.0082847
Marriage	.025789	.0308857	0.83	0.404	-.0347484	.0863265
OwnCapital	-.0201342	.0035002	-5.75	0.000	-.0269949	-.0132736
SavingsGroup	-.012421	.0049449	-2.51	0.012	-.0221133	-.0027287
Caste	-.0014557	.0039953	-0.36	0.716	-.0092866	.0063753
_cons	-.1493275	.0126909	-11.77	0.000	-.1742023	-.1244527

The coefficient of fit in a regression determines the proportion of the variation seen in the dependent variable that can be explained by the independent variable, here the R^2 value shows how much the ownership of a bank account can explain the presence of long term morbidity in a woman. We observe a R^2 value of 0.0558 and an adjusted R^2 of 0.0554 units in the regression. The low coefficient value of 5% indicates a positive but weak relationship between the main X and Y variables.

Analysing the coefficients, we observe that there is a negative correlation between Morbidity and *OwnBank, PrivIns, HealthPerm, OwnCapital, SavingsGroup* and *Caste*. Meaning, those women who have bank account in their name, own capital, are a part of a savings group or those who don't need to seek permission to access healthcare services are less likely to have a long term morbidity. Interestingly we also observe that those who have a private health insurance, are from socially backward or minority religious or caste groups tend to not have a morbidity.

While a relationship is identified between *Morbidity* and the dependent variables, looking at the p-values, the main X variable is significant at a 95% confidence level. At the same level, the variables *Caste, Marriage, GovIns* and *Meals* become insignificant.

The model failed the Ramsey-Reset test for omitted variables. *Appendix 2* shows a p-value of 0.0000 , and so we reject the null hypothesis that there are no omitted variables at a 99% confidence level. There exists no multicollinearity in the model as the mean VIF values, as seen in *Appendix 3*, is 1.08.

Table 4: Logit Result Table

Variables	Logit	SE	Marginal Effect	Odds Ratio
OwnBank	-0.008	0.0458829	-0.001	0.9882048
Educ	0.011**	0.0051503	0.001**	1.010383
Age	0.092***	0.0029088	0.006***	1.095677
Meals	0.057	0.0410883	0.003	1.057812
GovIns	0.046	0.0738746	0.003	1.053277
PrivIns	-0.334**	0.1066896	-0.020**	0.714366
HealthPerm	-0.181***	0.0409514	-0.012***	0.8241552
Marriage	0.404	0.5180877	0.021	1.415455
OwnCapital	-0.286***	0.0352711	-0.017***	0.7487346
SavingsGroup	-0.143**	0.058742	-0.009**	0.8618359

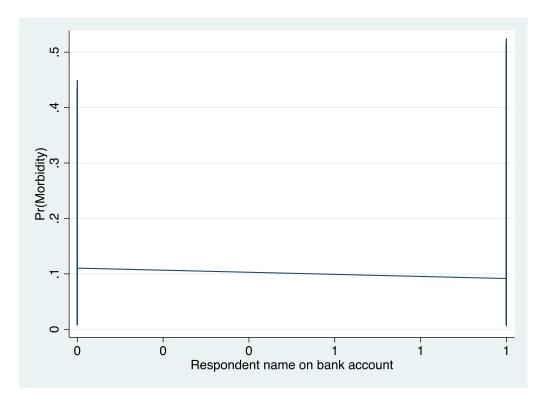|				
Caste	-5.929***	0.0509683	-0.002	0.9735403

Levels of Significance: (p-value <10%*, p-value <5%**, p-value <1%***)

Source: Author's Own

The very evident observation we see from Table 1 is that there are a significant number of variables that are not significant in the model. The variables that are significant at the highest confidence level of 99% are *Age, HealthPerm, OwnCapital* and *Caste*. Then the variables *SavingsGroup, PrivIns* and *Educ* are significant at 95% confidence level. Finally, there are some variables that are insignificant in the study.

With a unit increase in OwnBank, that is when a woman owns a bank account in her own name the probability that she has a long term morbidity decreases by 0.1%. The odds ratio tells us that a women who has a bank account is 0.9 times less likely to have a long term morbidity in comparison to those who don't. The same can be inferred from Graph 1. We see a downward sloping graph in the probability of having a morbidity when the variable moves from not having a bank account in their name to owning a bank account.

Graph 1: Logit CDF Graph

Source: Author's Own

A similar trend can be observed with *, PrivIns, HealthPerm, OwnCapital, SavingsGroup* and *Caste*. With a unit increase in private insurance, the probability that a women has a long term morbidity will decrease by 2%. The odds ration supports this observation, those women who have a private health insurance are 0.824 times less likely to have a long term morbidity. In terms of financial stability variables, if they own capital or If they are a part of a savings group, with a unit increase – is they do own capital or are a part of a savings group the probability of them having a long term morbidity reduces by 0.9% and 0.2% and the odds are 0.86 and 0.97 less likely to have a morbidity.

It was interesting to see that women who have to ask for permission to seek healthcare services, have a 1.2% decrease in their probability of having a morbidity. Those who don't have to asl permission are 0.82 times more likely to have a morbidity that those who do. Finally, the variable that measure the social standing of women, their caste shows that if them are from a socially backward caste or minority relation, the probability of them having a long term morbidity decreases by 0.2% and they are 0.9 times less likely to have a long term morbidity.

With a unit increase in education, the more number of years of education, the probability that a women has a morbidity increases by 0.1% and the she is 1.01 times more likely to have a morbidity. Similarly, with a unit increase in age, the probability that a women also has a morbidity increases by 0.6% and the she is 1.09 times more likely to have a morbidity.

We previously saw a negative relation between having a private insurance and the presence of a morbidity, however there is a opposite positive relationship (though insignificant) between government insurance and morbidity. The values indicate that, with a unit increase, if a woman owns a government health insurance, the probability that she has a morbidity increase by 0.3 % or she is 1.05 times more likely than a women who does not have a government health insurance.

With a unit increase in marital status, if a woman is marries the probability that she has a morbidity increases by 2.1% and that a married women is 1.4 times more likely to have a morbidity than a woman who is single.

An unexpected observation is the positive relationship between no of meals consumed per day and the presence of a morbidity in a woman. This model indicates that with a unit increase in *Meals,* the more meals a woman consumes in a day, the probability that she has a morbidity increases by 0.3 percent and with each increase in meal consumes a women in 1.05 times more likely to have a morbidity.

8. <u>Conclusion, Discussions, & Limitations</u>

In conclusion, overall both models showed a negative relationship between *Morbidity* and *OwnBank*. This matches my hypothesis that those women who own a bank account are more healthier as they have lower chance of having a morbidity. However, this relation was only significant in the LMP model and not the Logit Model. This positive relation is supported by existing literature that states that financial health and physical health go hand in hand in hand. But with my analysis I was able to conclude that owing a bank account is a significant determinant of health and hence financial stability. Supporting the literature I was also able to conclude that women who own capital and are a part of savings group are healthier. This can be contributed to the fact that they are in control of their financial and hence are financial independent.

There were a few observations that went against my hypothesis and previous literature. Past studies showed that women from backward castes tend to have limited access to healthcare and hence have a lower health status. However, my study showed otherwise. In addition, I found a contradictory observation that more educated women are less healthier.

These differences can be attributed to some biases in my data and model. This model failed the omitted variable test meaning, there might be a few irrelevant variables in my study or certain important variables have been included. This limitation can be fixed by adding more control variables for the various demographic characteristics and other proxies for financial stability.

An interesting observation is that those with a private health insurance were the one's wo were less likely to have a morbidity while those with government insurance were not protected and in fact were more likely to have a morbidity. This result is crucial in understanding the efficiency of the insurance schemes provided by the government. It highlights the age old of issue of implementation and efficiency of policies in our country. The mere presence of a policy is insufficient to obtain positive results. In also goes to talk about the accessibility of insurance. Only those who are financially able to afford private insurance and protected while those who are not are left in the dark, the health of the poor worsen. The government need to implement better interventions and ensure better accessibility.

Since it was found that women who were members of a savings group were healthier, the government should encourage more women to take part in such groups. Not only is it beneficial to the woman on an individual level in terms of financial and economic standing, but also on a global level as it improves the quality of the population. In conclusion, a women's financial stability should be given importance in policy making as it is beneficial to their health and well-being.

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10. <u>Appendix</u>

Appendix 1: Breusch-Pagan Test

H_o: Constant Variance

Chi2	1645.83
Prob > Chi2	0.0000

Appendix 2: Ramsay RESET test

H_o: Model has no omitted variables

F(3, 27444)	56.03
Prob > F	0.0000

Appendix 3: vif test

Variable	VIF	1/VIF
Educ	1.32	0.759832
Age	1.17	0.855821
Caste	1.1	0.912042
OwnCapital	1.09	0.914434
OwnBank	1.07	0.934034
HealthPerm	1.03	0.970608
Meals	1.03	0.970881
PrivIns	1.02	0.982167
SavingsGroup	1.02	0.984891
GovIns	1.01	0.992904

| **Marriage** | 1 | 0.998954 |

| **Mean VIF** | 1.08 |