Health Status of Women in India – A Study Using NFHS 4 Data

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Abstract

Health is an essential aspect of human well being as well as economic growth. Quality of health care services is one of the most crucial factors that every individual have the right to receive. One of the critical aspects is the women's health and overall well-being, which is influenced by various factors like gender disparities, malnutrition, poverty, education, employment and access to quality health care services. Poor health and social status deprive many women and adolescent girls of getting affordable and accessible health care services. In general, women are vulnerable to inadequate nutrition in all phases of life, impacting their growth and development. Globally about 800 women die every day due to preventable causes related to pregnancy and childbirth. Some of the top causes of death among women in India due to NCDs are heart attacks, anemia, stroke and respiratory diseases. As per the NFHS 4 (2015-16), 53.1 per cent of non-pregnant women and almost half of the pregnant women are anemic. The main objective of the study is to assess how socio-economic, demographic and environmental factors affect the overall health status of the women. The data is taken from the fourth round of the National Family Health Survey. Univariate and bivariate statistical methods are used for the analysis.

Health is an important aspect for human well being and economic growth. Quality of health care services is one of the important factors every individual have the right to receive. One such aspect is the women's health and well being. The various factors concerning the women's health are numerous like gender disparities, early marriage, domestic violence, sexual

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abuse, malnutrition, poverty, illiteracy and access to affordable and quality health care services. In India poor health and social status affects millions of women and adolescent girls, making accessibility and affordability of health care services a challenge in 21st century in India. Social issues like gender bias, dowry system, early marriage, often results in abuse of women impacting their overall health. Poverty is a significant aspect for poor health status of majority of Indian population and women represent the disproportionate share of the poor. Globally about 800 women die every day of preventable causes related to pregnancy and childbirth and in that 20 percent of them are from India (Dr. Pallika Singh, 2020). Of the top causes of death among women in India are NCDs such as heart attack, stroke and respiratory diseases. Women seeking health in rural areas often stumble on the poor quality of health care services being provided. Before investigating the limitations of health systems and its consequent demands to address rights of women to health and health care, it's important to understand the state of women health and its underlying factors associating it. Main determinants of women health includes poverty, place of residence, social biases on caste, gender, sex, disability closely relates to factors like work, housing environment, education etc.. Though few factors affect the general population too, women experience it differently due to their low status in the society. There is a need to look into the overall women's health holistically based on their social environment and their experiences in understanding their health problems. Nearly 55 million people in India are pushed below poverty line every year because of the catastrophic effects on out of pocket spending on healthcare services (PFI, 2017). Health care resources are unevenly distributed based on geographical locations with high difference based on rural and urban settings. The unsatisfactory levels of health indices indicate the limited success of public health system in meeting the preventive and curative requirements of the general population. (Women Coordination Committee, 2006.).

Lack of commitment by Indian Government to ensure Universal access to health care facilities not only jeopardize the health of the people but also

aggravate it by posing access difficulties. The women who represent the disproportionate number of the poor, high cost of medicines implied reduced household expenditure for paying the cost of life saving medicines. Nearly 50 lakh women suffer ill health due to pregnancy related complications and childbirth alone. (Dr. Pallika Singh, 2020). Inappropriate care during pregnancy and childbirth and inadequacy of services to detect and manage complications relates to most of the maternal deaths. The chronic state of anemia along with poor health care for women underlies the high morbidity and mortality of Indian women. As per the NFHS 4 (2015-16), 53.1 per cent of non-pregnant women and almost half of the pregnant women are anemic. The poor health status among women is backed by their socially and economically disadvantaged positions as individuals of certain communities in addition to nutritional status, maternal health, chronic NCDs like heart attack, stroke, and respiratory problems contribute significantly to the heavy burden of disease faced by women.

Objective of the study

The main objective of the study is to assess how socio-economic, demographic and environmental factors affect the overall health status of the women.

Data and Methodology

Data is taken from the fourth round of the National Family Health Survey. Univariate, Bivariate statistical methods have been used for the analysis. Chi-square and logistic regression analysis has been used to interpret the data.

Analysis

The variables taken for analysis include the following:

Demographic Factors

- Age
- Caste

- Religion
- Place of residence

Socio-Economic factors

- Wealth Index
- Education

Lifestyle Factors

- Alcohol Drinking
- Smoking

Reproductive Factors

- Abortion

NCD morbidities

- Diabetes
- Asthma
- Heart Problem
- Cancer
- Anemia

Health status variable

- Health care facility for treatment
- Health insurance variables

Table 1: Percentage Distribution of various NCD Morbidity among Women

NCD Morbidity	Percentage
Diabetes	21.0%
Asthma	24.6%
Thyroid	29.2%
Heart Disease	23.0%
Cancer	2.1%

The percentage of various NCD morbidities among women, almost 30 percent of women are down with thyroid related problem followed by other NCDs like heart diseases and respiratory related problem like asthma.

Table 2: Percentage Distribution of Various NCD Morbidity based on Lifestyle Factors

NCD Morbidity	Drinking Alcohol	Smoking cigarettes
Diabetes	21.4% (231)	20.3% (56)
Asthma	37.7% (408)	29.0% (80)
Thyroid	22.1% (239)	22.5% (131)
Heart Disease	34.3% (371)	47.5% (10)
Cancer	3.1% (33)	3.6% (276)

Considering the lifestyle habits of women in comparison to other NCD morbidities, in between 30-50 percent of women who have the habit of alcohol consumption (frequency of alcohol drinking not considered) and smoking(mainly cigars) are at high risk of heart disease and respiratory related problems like asthma (irrespective of other background characteristics).

Table 3: Percentage Distribution of various NCD Morbidity based on Different Age Group

NCD Morbidities	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Diabetes	3.7% (356)	5.1% (489)	7.4% (707)	11.0% (1047)	16.2% (1543)	23.1% (2203)	33.5% (3193)
Asthma	9.3% (1039)	5.1% (1006)	7.4% (1316)	11.0% (1611)	16.2% (1901)	23.1% (1983)	33.5 (2338)
Thyroid	6.0% (792)	8.4% (1114)	14.2% (1878)	17.1% (1494)	19.5% (1934)	17.5% (1943)	17.3% (2332)
Heart Disease	7.2% (748)	8.6% (119)	11.5% (127)	14.3% (108)	18.5% (143)	18.6% (151)	21.4% (186)
Cancer	13.1% (2589)	12.4% (3158)	13.2% (4533)	11.2% (5799)	14.9% (7079)	15.7% (7448)	19.4% (8737)

Women who are above 40 years are more prone to chronic NCDs like diabtetes and heart problem. The above table indicates that almost 30 percent of women above 40 years of age are at the risk of Diabetes and Respiratory problems like Asthma. And above 20 percent of women above 40 years are at high risk of chronic NCDs like Heart problems and Cancer.

Table 4 : Percentage Distribution of various NCD Morbidity based on Place of Residence

NCD Morbidities	Urban	Rural
Diabetes	44.9% (4286)	55.1% (5252)
Asthma	30.3% (3393)	60.7 (7801)
Thyroid Problem	47.2% (6259)	52.8% (7013)
Heart disease	28.2% (2943)	71.8% (7509)
Cancer	26.2% (252)	73.8% (708)

Demographic factors like place of residence play an important role in determining the health status of women (of all ages). More than 60 percent of women belonging to rural households are infected with NCDs like Diabetes, Respiratory problems like Asthma, thyroid problems, Cancer (as in rural areas there is a usage of traditional way of cooking).

Table 5: Percentage Distribution of Women who had Miscarriages, Abortion and Still Birth

	Percentage
Miscarriage	62.9
Abortion	28.0
Still birth	9.0

Table 6: Percentage Distribution of Women who had sought Treatment for Pregnancy Complications

Sought Treatment for Pregnancy Complications	Percentage
No	16.0
Yes	84.0

Table 7: Percentage Distribution of Women who had Abortion based on NCD Morbidities

NCD Morbidities	Percentage	Total
Diabetes	15.7 (113)	320
Asthma	21.9 (158)	460
Thyroid Problem	45.6 (329)	890
Heart disease	28.1 (203)	526
Cancer	1.2 (9)	26

Table 5 indicates that considering the reproductive health issues, above 60 percent of women (considering the reproductive age group) have reported to have either miscarriages or abortion. Table 7 shows that nearly 45 percent of women who have thyroid related problems during pregnancy when compared to other chronic NCDs have reported to have done abortion.

Table 8: Percentage Distribution of Women who had Miscarriages, Abortion and Still Birth based on Socio-Economic and Demographic Characteristics

Socio-Economic and Demographic factors	Reproductive Health Problems		
	Miscarriage	Abortion	Stillbirth
Wealth Index			
Poorest	18.7 (3728)	13.7 (1212)	30.0 (859)
Poorer	22.1(4402)	21.0(1861)	25.8 (738)
Middle	21.2 (4232)	23.5 (2083)	19.9(569)
Richer	19.4 (3860)	22.2 (1975)	14.2 (407)
Richest	18.6 (3714)	19.7 (1747)	10.1 (290)
Place of Residence			
Urban	29.6 (5904)	33.6 (2987)	21.3 (611)
Rural	70.4 (14032)	66.4 (5891)	78.7 (2252)

Socio-Economic characteristics like wealth index and place of residence of women play a significant role in reproductive health problems. Here we

can see that more than 70 percent of women belonging to the poorest households have reported to had either miscarriage or abortion (this is alarming, as one of the drawbacks is not getting a proper access to affordable health care services in these areas and lack of awareness). But of the positive thing to be noted is that above 80 percent of women irrespective of socio-economic demographic characteristics had sought treatment for pregnancy and abortion (table 6).

Table 9: Health Facility Visited for Seeking Treatment for Pregnancy Complication

Health care facility	Percentage
Public hospital	18.2
Public CHC/rural hospital	7.5
PHC/additional PHC	3.3
Private health facility	59.9
Private dispensary/ clinic	4.1
At home	1.9

Table 10 : Reason Did not Seek Treatment for Abortion and other Pregnancy Complications

	Percentage
Could not afford treatment	23.6%
Could not afford transport	5.9%
Stigma by provider	2.8%
Stigma by community	2.8%
Complication was minor/do not require treatment	15.0%
Problem resolved itself	28.3%
Could not get away from family responsibilities	8.3%
Did not get permission	18.1%
Other reasons	7.1%

Table 9 and Table 10 indicates that more than 60 percent of women prefer private health care facilities, which shows a negative aspect for many women belonging to the poorer households as they cannot even afford those services thus pushing them to more poverty. So more than 20 percent of women (table 11) don't prefer to get treatment for any pregnancy complications as they are unaffordable for them.

Table 11 Percentage Distribution of Anemia Level among Women

Anemia Level	Percentage
Severe	1.0
Moderate	11.8
Mild	37.6
Not anemic	48.5

Table 12: Percentage Distribution of Anemia Level among Women in Different Age Groups

Age	Severe	Moderate	Mild	Not Anemic
15-19	1.0 (1201)	11.5 (13981)	39.8 (48502)	47.7 (58046)
20-24	1.0 (1216)	13.1 (15727)	38.3 (46102)	47.6 (57220)
25-29	0.9 (1012)	12.4 (14018)	38.2 (43088)	48.4 (54579)
30-34	1.0 (916)	11.7 (11115)	37.7 (35839)	49.7 (47261)
35-39	1.1 (963)	11.7 (10388)	38.0 (28691)	49.2 (43653)
40-44	1.2 (867)	12.4 (9290)	38.2 (28691)	48.3 (36320)
45-49	1.1 (775)	11.2 (7971)	38.2 (27179)	49.5 (35260)

Table 13: Percentage Distribution of Anemia Level among Women based on Socio-Economic and Demographic Characteristics

Demographic factors	Anemia level			
	Severe	Moderate	Mild	Not anemic
Wealth Index				
Poorest	23.1 (1605)	22.3 (18383)	21.4 (56364)	16.5 (54842)
Poorer	23.7 (1649)	22.3 (18429)	21.8 (57383)	21.0 (69719)
Middle	22.1 (1537)	21.2 (17464)	20.5 (53817)	21.6 (71735)
Richer	18.8 (1304)	18.7 (15454)	18.8 (49341)	20.8 (69193)
Richest	12.3 (855)	15.5 (12760)	17.6 (46227)	20.1 (66850)
Place of Residence				
Urban	25.6(1779)	26.4 (21764)	27.6 (72501)	30.6 (101821)
Rural	74.4 (5171)	73.6 (60726)	72.4 (190631)	69.4 (230518)

The consequences of anemia includes high risk of low birth weight, premature birth, perinatal and neo-natal mortality, especially for pregnant women and other health related issues among the non-pregnant women. Most women who have mild anemia may experience fatigue and have reduced work capacity. Anemia among pregnant women can lead to children being born malnourished. Almost 40 percent of women have reported to have severe anemia (considering all the age groups). More than 70 percent of women belonging to poorest households and are living in rural areas have reported to be severely anemic (table 13).

Table 14: Health Facility visited for Seeking Treatment for Various NCD Morbidities

Health Facility	Percentage
Public Hospital (Govt/Municipal)	24.9
CHC/Rural Hospital/Block PHC	19.0
PHC/Additional PHC (public)	9.5
Private Hospital	23.8
Private Doctor/Clinic	4.8

Around 25 percent of women prefer to get treatment in public health care facilities (irrespective of other background characteristics), in that in almost 20 percent of women prefer community health care centers in rural areas.

Table 15: Overall Health Insurance Coverage in India based on Wealth Index

Wealth Index category	Percentage
Poorest	17.2 (22896)
Poorer	18.5 (27600)
Middle	19.7 (28975)
Richer	18.3 (25360)
Richest	15.3 (20137)

Considering the health insurance coverage (any type of health insurance schemes), considering all the states taken less than 17 percent of households are only covered by any type of health insurance. And in that only 16 percent of poorer households are covered by any type of health insurance.

Table 16: Logistic Regression of Health Insurance Coverage based on Socio-Economic and Demographic Characteristics

Factors	P value	β value
Place of Residence		
Urban®		
Rural	0.000	0.961***
Caste		
General®		
Scheduled caste	0.000	1.499***
Scheduled tribe	0.000	2.375***
Other backward caste	0.000	1.462***

Religion

Other ®		
Hindu	0.000	0.315***
Muslim	0.000	0.161***
Christian	0.000	0.272***
Wealth index		
Richest®		
Poorest	0.000	0.852***
poorer	0.000	1.021***
Middle	0.000	1.186***
Richer	0.000	1.159***
Education		
Higher ®		
No education	0.000	0.949***
Primary	0.000	1.216***
Secondary	0.000	0.963***

Socio-economic characteristics such as place of residence, caste, religion and education of women play a significant role in determining the coverage of health insurance. The odds ratio of socio-economic and background characteristics indicate that women belonging to poorer households and living in rural areas have lesser chance to get coverage of any type of health insurance scheme. Other background characteristics like caste, religion and education play a significant role in getting access to the coverage of health insurance (any type of health insurance scheme).
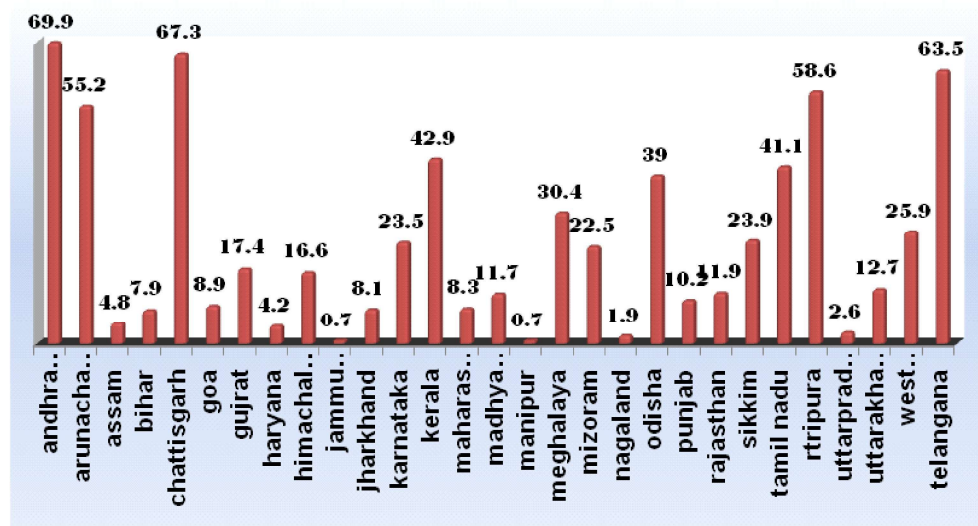
Pic 1: **State wise percentage of Health Insurance coverage**

Considering the state wise percentage, almost 70 percent of households (both urban and rural) in the states of Andhra Pradesh, Chattisgarh, Telangana and Tripura have reported to have been covered by any type of health insurance schemes followed by Kerala and Tamil Nadu.

Summary and Conclusion

Taken the percentage of various NCD morbidities among women, almost 30 percent of women have reported Thyroid related problems (considering women in reproductive age) followed by heart problem and respiratory diseases like Asthma. Considering the life style habits of women, nearly 50 percent of women who have the habit of alcoholism and smoking (cigars) are at high risk of chronic NCD morbidities like heart disease and asthma. Background characteristics like place of residence play a significant role in determining the health status of women. Women belonging to rural areas are susceptible to NCDs and other related co-morbidities. More than 60% of women belonging to rural households have reported to have various reproductive health issues like miscarriage, abortion, stillbirth irrespective of other background characteristics. Almost 40 percent of women have

reported to have severe anemia (considering all the age groups). Anemia can sometimes leads to women being malnourished; more than 70 percent of women who belong to the poorest households and who are living in rural areas have reported to be severely anemic. But positive thing to be noted is that almost 80 percent of women prefer to get treated for their reproductive health issues irrespective of their background characteristics.

Socio-economic and background characteristics play a significant role in determine the coverage of health insurance. In all the states considered less than 17 percent of households reported to have the coverage of any type of health insurance schemes (irrespective of other background characteristics). Considering the state wise percentage coverage of health insurance, Andhra Pradesh, Chhattisgarh, Telangana have reported to have almost 60% of households covered by any type of health insurance followed by Kerala and Tamil Nadu.

Programs and Policies Suggestions

- Providing education and employment opportunities to women can make intervention in creating the awareness about the access to health facilities.

- Providing access in safe abortion is still a challenge today.

- Creating awareness among women in the society especially in rural areas about gender equality, education of women, women rights, employment opportunities, usage of affordable health care facilities.

References

- Dr.Pallika Singh (2020), "Women's Health in India a Matter of Concern or Denial", A Article in Daily O.

- National Family Health Survey Report 4 (2015-2016), Women Data.

- Raju Kawsalya, Shanmugam Manoharan (2017), "Health Status of Indian Women-ABrief Report", MOJ Proteomics and Bioinformatics-MedCarve.

- Richa Jain Kalra, (2019), "Access to Health Care a Distant Dream for Most Indian Women", Article in DW Mode for Minds.

- Shivanshi Rathore, (2020), "Health Care For Women in India", Article by Smile Foundation.

- www.Vims.ac.in/blog/women health in India, (2018), "Women Health in India-Current Scenario and Challenges".

- Zodpey S, Negandhi.P (2020), "Inequity in Health and social Status for women in India-Along standing Bare", Indian Journal of Public Health, Volume 7, pg 64.

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