



Full Length Research Article

**INEQUALITY IN HEALTH AND HEALTH CARE UTILIZATION AMONG TRIBES AND NON-TRIBES
IN INDIA**

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ABSTRACT

Health and health care needs to be distinguished from each other. Besides health care arrangements, many other factors outside the health sector play a key role in determining the health status of individuals and communities such as standard of living, access to basic minimum social services, gender equity etc. A number of factors affect the evolution of health care arrangement in a society. They include its cultural understanding of ill health and well-being, extent of socio-economic disparities, reach of health services and quality and cost of care. The National policy on tribal emphasized the need of health care services in the tribal areas as the immediate requirement in order to check malnutrition and other infectious diseases. Health is a prerequisite for human development and is an essential component for the well being of the mankind. The health problems of any community are influenced by interplay of various factors including social, economic and political ones. The study aims to assess the inequality existing in health and health care utilization among the tribes and non-tribes and examine the factors affecting the health care utilization among the tribes. Data for this study have been used from NFHS-3. Preliminary analysis shows that utilization of private health care facilities are more as compared to government health care facilities. Education and standard of living is having impact on utilization of health care facility among tribes and non-tribes. As education and standard of living increases the utilization of government health facility decreases.

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INTRODUCTION

Health and health care need to be distinguished from each other. Besides health care arrangements, many other factors outside the health sector play a key role in determining the health status of individuals and communities such as standard of living, access to basic minimum social services, gender equity etc. A number of factors affect the evolution of health care arrangement in a society. They include its cultural understanding of ill health and well-being, extent of socio-economic disparities, reach of health services and quality and cost of care. The National policy on tribal emphasized the need of health care services in the tribal areas as the immediate requirement in order to check malnutrition and other infectious diseases "The term inequity has a moral and ethical dimension. It refers to differences which are unnecessary and avoidable but which are also considered unfair and unjust. So, in order to describe a certain situation as being inequitable, the

cause has to be examined and judged to be unfair in the context of what is going on in the rest of society" (Whitehead, 2000). Health Inequity is the disparities in health that are a result of systemic, avoidable and unjust social and economic policies and practices that create barriers to opportunity. Whereas, health equity means the absence of differences in health between groups with differential exposure to those social and economic policies and practices that create barriers to opportunity. Health equity is the absence of systematic disparities in health (or in the major social determinants of health) between groups with different social advantage/disadvantage (e.g. wealth, power, prestige) Braveman, Gruskin (2003). Thus, health inequities are the presence of differences in health and health care, whereby some segments of the population fare better than others. The degree of health inequalities escalates when the rising average income levels of the population are accompanied by rising income inequalities (William *et al*, 2008). These socio-economic inequities are one of the major causes for inequities in health status. In most countries, disparities in health achievements may be found according to class, gender, ethnicity, religion, geographical region, and other such characteristics. Inequities in health are

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unfair and avoidable differences in health status and access to healthcare for various groups in any society. Inequities in health are a breach of basic principles of justice since they imply inequities in opportunities for people to live and deliver to the fullest of their capacity. The WHO position paper for the 1995 World Summit for Social Development also stated that investment in health is essential for economic growth based on a productive work force. To achieve this, growth needs to be accompanied by more equitable access to the benefits of development, as inequities have severe health consequences and pose an unacceptable threat to human well being and security. Health is a prerequisite for human development and is an essential component for the well being of the mankind. The health problems of any community are influenced by interplay of various factors including social, economic and political ones. The common beliefs, customs, practices related to health and disease in turn influence the health seeking behaviour of the community (ICMR Studies 1998). The choice of facility reveals that the vulnerable sections like SC/STs and labourers still have a higher probability of visiting the government facilities, mainly because of price differentials (Gupta & Dutta, 2003). The choice of facility reveals that the vulnerable sections like SC/STs and labourers still have a higher probability of visiting the government facilities, mainly because of price differentials.

Healthcare inequities are evident from Life expectancy at birth of a girl in one part of world is 40 years less than another, variation of IMR from 20 to 120 per 1000 live-births and lifetime risk of maternal death varies from 1 in 8 (Afghanistan) & 1 in 17400 (Sweden). Immunization coverage strongly correlates with socio-economic status. Rich consume more hospital and public health care services than the poor. Inequality exists by (Progress such as) place of residence, race, occupation, gender, religion, education, socio-economic status & social capital etc. (Sahu, 2009). Socially backward groups like SC/ST and OBC are usually associated with lower use of reproductive health services and poorer health outcomes. According to the NFHS (National Family Health Survey) 3, the likelihood of receiving any type of ANC (anti-natal care) is lowest among women belonging to SC or ST. Only 18 per cent of the births among these women are conducted at a health facility, compared to 51 per cent among women, who do not belong to SC, ST, or any OBC (Bansod & Pedgaonkar, 2014). Studies undertaken in the country indicate that the primitive tribes have distinct health problems, mainly governed by multidimensional factors like their habitat, difficult terrain, ecologically variable niches, illiteracy, poverty, isolation, superstition and deforestation. Hence an integrated multidisciplinary approach has been adopted by different researchers to study the tribal health problems (ICMR Bulletin 2003). In this study we tried to look at the health problems and utilization of the services.

Objectives

1. To assess the inequality existing in health and health care utilization among the tribes and non-tribes in India.
2. To examine the factors affecting the health care utilization among the tribes.

METHODS AND MATERIALS

Data for drawn NFHS-3, which was conducted in 2005-06, it provides information on fertility, mortality, family planning,

HIV-related knowledge, and important aspects of nutrition, health and health care. NFHS-3 collected information from a nationally representative sample of 109,051 households, 124,358 women age 15-49, and 74,369 men age 15-54.

The variables considered under this study are presented below:

Dependent variables :	Non-utilisation of ANC services Unsafe delivery Low body mass index (BMI < 18.5 kg/m ²) Prevalence of any anaemia and Health care utilization
Independent variables :	Age, Education, Type of place of residence, Wealth index, Sex of head of the household, and Caste

The BMI is calculated as weight in kilograms divided by the height in meters squared. A BMI of less than 18.5 kg/m² usually indicates chronic energy deficiency. A non-pregnant woman is considered anaemic if her haemoglobin level is less than 12 grams/decilitre. For a pregnant woman, the cut-off level for being anaemic is 11 grams/decilitre. ANC and safe delivery are available only for those women who gave birth during the three years preceding the survey. Bi-variate and Multi-variate techniques have been used to see the association between health and health care utilization among the tribes and non-tribes population. Also chi-square test also applied to check the level of significance of the variables.

RESULTS

Before studying the health and health care utilization among the tribes and non-tribes it is always better to have their some sort of background knowledge. Table 1 presents the percent distribution of tribes and non-tribes by their socio-economic characteristics. It is found that more tribes are illiterate than the non-tribes, illiterate and low education makes them more vulnerable to access facilities provided by government and also their own health care. They mainly live in rural areas; almost 90 per cent of them are living in rural areas as compared to the non-tribes people. Economically also tribes are not well, they found to be poorest to poor category in terms of wealth quintile.

Health Status

To assess the health status of tribes and non-tribes prevalence of any anaemia and low body mass index (BMI < 18.5 kg/m²) (Chronic energy deficiency) has been considered under this study.

Anaemia

It is observed that anaemia is more prevalent among the tribes, more than two-third of the tribal women is found to be anaemic as compared to the non-tribes. Anemia is a serious health problem among the tribal women that needs to be addressed carefully (Table 2).

BMI

BMI is also one of the health indicators to look at the health status; it is found that more tribal women are under weight than the non-tribal women. Whereas, it can be seen that

overweight or obesity is more among non-tribes as compared to tribes (Table 3).

Table 1. Percent distribution of tribes and non-tribes by their socio-economic characteristics

Age-groups***	Tribes	Non-tribes	Total
15-24	39.7	38.0	38.2
25-34	31.7	30.5	30.6
35+	28.6	31.4	31.2
Education***			
No education	61.7	38.8	40.7
Primary	13.2	14.7	14.6
Secondary	23.2	38.7	37.4
Higher	1.9	7.8	7.3
Marital Status***			
Never married	19.0	20.5	20.4
Married	75.4	74.9	74.9
Widowed/divorced/not living together	5.5	4.6	4.7
Sex of household head***			
Male	89.7	86.8	87.0
Female	10.3	13.2	13.0
Place of residence***			
Urban	11.1	35.1	33.1
Rural	88.9	64.9	66.9
Wealth Index***			
Poorest	46.0	14.9	17.5
Poorer	24.1	18.4	18.9
Middle	14.6	20.7	20.2
Richer	8.9	22.1	21.0
Richest	6.4	23.9	22.5
Total	100.0 (10118)	100.0 (111137)	100.0 (121255)

***significance at 01% level

Table 2. Percent distribution of tribes and non-tribes by the level of anemia

Anemia level***	Tribes	Non-tribes	Total
Severe (<7.0 g/dl)	2.4	1.7	1.8
Moderate (7.0-9.9 g/dl)	21.3	14.4	15.0
Mild (10.0-11.9 g/dl)	44.8	38.0	38.6
Not anemic	31.5	45.9	44.7
Total	100.0 (9568)	100.0 (104319)	113887 (100.0)

***significance at 01% level

Table 3. Percent distribution of tribes and non-tribes by the body mass index

Body Mass Index	Tribes	Non-tribes	Total
Under weight (<18.5 kg/m) ²	46.8	38.0	38.8
Normal (18.5-24.9 kg/m) ²	52.6	58.7	58.1
Overweight/Obese (≥ 25.0 kg/m) ²	0.6	3.3	3.1
Total	100.0 (9511)	100.0 (95224)	100.0 (104735)

***significance at 01% level

Health care utilization

Health care utilization is also one of the important factors that tribes are lacking behind. Here three indicators are used to assess the utilization of health care services among tribes and non-tribes. The indicators are as follows:

- Utilisation of ANC services
- Medical assistance during delivery
- Utilization of health facilities

ANC

If the woman does not get proper ANC care during her pregnancy, she may have lot of complications during delivery

and it affects her baby also. Therefore ANC is very important to the each and every pregnant woman, whether they are rich or poor, SCs/STs or any other caste groups. It is found that tribal women are availing less ANC services at the time of their pregnancy as compared to their non-tribal women (Table 4).

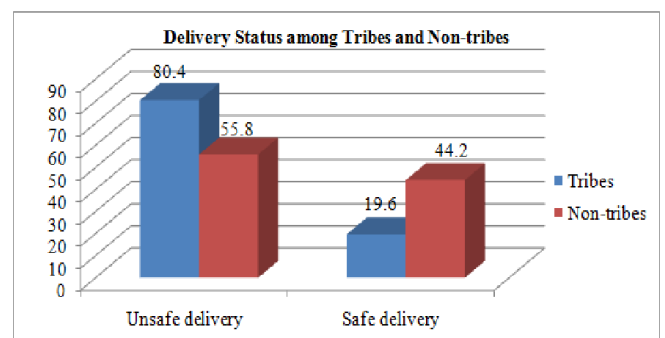
Table 4. Percent distribution of tribes and non-tribes by the ANC visits

ANC	Tribes	Non-tribes	Total
No ANC Visits	29.8	22.4	23.1
1	8.8	5.7	6.0
2	20.7	18.2	18.5
3+	40.7	53.6	52.4
Total	100.0 (3688)	100.0 (34605)	100.0 (38293)

***significance at 01% level

Delivery

Delivery is also one of the important events to the women in her life time. If it is conducted in a health facilities mother and child will get the proper care and services they need. But if it is conducted at home without any body's assistance it will be high risk to the mother and even some extent to the new born child. So, need to give emphasize on safe institutional deliveries rather than at home unsafely to reduce the IMR and MMR. From the analysis we found that majority (four-fifth) of the tribal women has unsafe delivery as compared to the non-tribal women. However, more non-tribal women go for safe delivery.



Health care utilization

Table 5 shows the percent distribution of tribes and non-tribes by the health care utilization Tribes are using more government health facilities as compare to the non-tribes, whereas, higher proportion of non-tribes are availing the health care facilities which is available in the private sector.

Table 5. Percent distribution of tribes and non-tribes by the health care utilization

Health Facility***	Tribes	Non tribes	Total
Private	52.2	70.6	69.1
Government	47.8	29.4	30.9
Total	100.0 (10119)	100.0 (111137)	100.0 (121256)

***significance at 01% level

We have seen poor health and poor health care utilization among tribes and non-tribes. The association may be because of the distribution of women belonging to different tribes by their socio-economic characteristics. Higher the education of

Table 6. Regression model shows the effect of predicted variables to the health and health care utilization among tribes and non-tribes

Background characteristics	Unsafe delivery	Anemic	Low BMI	Health care utilization
Age	1.169***	0.926***	0.864***	1.253***
Education				
No education®				
Primary	0.503***	0.952***	0.851***	1.343***
Secondary	0.287***	0.883***	0.908***	1.393***
Higher	0.084***	0.728***	0.716***	1.088**
Marital Status				
Never married®				
Married	0.785**	1.136***	0.669***	0.827***
Sex of household head				
Male®				
Female	0.991	1.002	1.030	0.947***
Place of residence				
Urban®				
Rural	2.032***	0.939***	1.064***	0.985
Wealth Index				
Poorest®				
Poorer	0.619***	0.905***	0.878***	0.918***
Middle	0.395***	0.789***	0.676***	0.993
Richer	0.280***	0.705***	0.490***	0.787***
Richest	0.128***	0.586***	0.322***	0.461***
Caste				
Non-tribes®				
Tribes	1.594***	1.549***	1.071***	2.060***
Constant	3.725***	1.822***	1.853***	0.340***

women greater the chance of women accessing the ANC services, therefore, it is essential to adjust the effect of these other variables of tribes per se. Logistic regression analysis has been carried out to understand the effect of tribes per se on various health and health care utilization. Table 6 shows the effect of predicted variables to the health and health care utilization among tribes and non-tribes. Data show that the effect of social stratification on health and health care are

clearly observed in India. Even after controlling the background variables tribes have poor health/nutrition status as compared to non-tribes; also they have lesser utilization of health care services. Therefore, greater efforts are required to bring improvements in health of the tribes so as to minimize the inequalities between tribes and non-tribes. The equity can be achieved through efficient and equitable health systems with universal coverage, improvement of data quality and monitoring health inequalities. Pro-poor approach and Public-Private partnership would help to reach target population. The health care services are consumed more by economically stable population and the poor bears the risk of medical impoverishment or does not have access to health care services. The purpose of minimizing health inequities is to contribute to poverty reduction and promotion of economic development.

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