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EFFICACY OF PRIMARY HEALTH CENTERS IN TRIBAL DISTRICTS OF MAHARASHTRA: AN EMPIRICAL ANALYSIS

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Abstract

The issues of health are directly related to development. The Human Development Index and the Multidimensional Poverty Index assume health and life expectancy as an important component of measuring development. As regards the tribals are considered it is always seen that most social indicators (health, education and housing) are very poor due to structural impediments. One of the most important intervention to cope up with the health issues is the primary health centers which are considered as agencies of the government which guarantee better health conditions and access to medical support and treatment. However, the efficacy of these institutions is a matter of investigation especially with regard to the marginalized population such as the tribals. This paper attempts to understand the efficacy of the primary health centers in Maharashtra to provide the required health facilities and access to medical treatment.

Tribes, in India form the part of the aboriginal communities that live in the hilly and forest regions of the country. Tribals are among the most vulnerable groups in larger development process. They are the most affected people either due to their distance from the developmental process or in terms of inaccessible geographical territories which ultimately is unable to produce fruits of development. The current need of resources, for instance land, water, minerals are still found in areas inhabited by the tribal communities.

Development discourse that is largely based on the growth model has excluded these communities both, as a stake holder and beneficiary of the development process. The new projects are seldom useful to these communities who live a minimalistic life. Right from the beginning of the modern development process, they have remained the last priority of the State and are marginalized from this process.

As regards the social indicators of the development are concerned, in terms of health, education and housing, the tribal communities have got the least share in the country. Tribals have been

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struggling to get access to all the above three development indicators. Though some special purpose vehicles are developed for this purpose, the participation of tribals has always remained low.

The National Rural Health Mission of the government of India was essentially brought in to minimize the health problems among the rural communities and the tribal communities. Primary Health Centers had an important role to play in this process and were considered as the nodal agencies to undertake interventionist role to mitigate the health issues among the tribals. Both preventive and curative practices were to be brought in while dealing with the health issues of these venerable groups. Upon examination, and the studies carried out for the purpose of access to health of tribals, it is reported that the problems like that of anemia and sickle cell are very prominent among the tribals. A whole lot of facilities pertaining to health for institutional deliveries to general health problems are only being affected positively in recent times. However, the health infrastructure is discriminatory and biased against the tribal communities. The first ever study conducted by the research scholar in the year 2015, the scholar concludes that the practice of posting the doctors in the tribal areas is not done objectively, but they are picked up community wise. The two starking examples were that most doctors serving the primary health centres in Nandurbar are mostly from the Bhil community, with degrees in Bachelors in Ayurvedic Medicine and not MBBS Doctors. The same was observed in Palghar District where generally the doctors belonging to the Scheduled Caste communities with BAMS were heading the primary health centres. This practive makes the researcher to concluded that there is a problem of structural discrimination, which adversely affects rural health.

Most studies, including the census data show that the literacy rate among the tribals is above 75 per cent. This is an issue of major concern, for if the literacy rates are so high, why it is not translating into outcomes in terms of their economic wellbeing. The literacy rates so published are based on the functional literacy and or the enrollment ratio of the students belonging to tribal communities. The government has in its endeavor to empower such communities have started the Ashram Shalas, Eklavya Vidyalayas (Tribal Schools) to raise their standard of living. With the policies of the government like the gram panchayat schools, ashram shalas, it is observed that the actual literacy has increased but the educational outcomes among the tribals remain quite low. Some of the major reasons of lower educational outcomes may be in terms of inadequate trained human resource in the school, poor infrastructure, schools are situated in far off places, where the child has to walk or there are no enough financial resources to

commute daily etc. The only motivation to go the school remains the mid-day meals in the primary schools. This may be one of the reasons to enumerate and determine literacy rate.

An important limitation of such schools is that they are located in the tribal areas or at the most at the district or taluka place. Such initiatives of empowerment will take time to bare the fruits. There is a dire need for a more innovative and inclusive approach to bring such students to urban areas and provide for better educational opportunities for the tribal communities. There must be concentrated efforts on the part of the government to design a policy whereby boarding facilities are provided in urban areas and the children from the tribal areas are admitted to public and private schools. Also, just like the Right to Education Policy, it shall be made mandatory to all the schools receiving government grants that a minimum 5-7 percent seats are reserved for such children who are the benefactors of the such a policy. Unless education becomes a part and parcel of the life of tribals, it is not possible to ameliorate their conditions. It is the social alienation and limited access to education especially higher education that has contributed to the abysmally lower economic inclusion of the tribals.

Economic conditions of the tribals have remained rather poor since the independence. The most marginalized community in the country are the tribals who are spread across the country in the forests and mountains. Their access to the so-called 'civilized' world is minimum. Not even 10 percent of the tribal community can be seen as city dwellers. Those working in the cities still form the lowest rung of the economic system of the country. These tribals come to the cities in search of some employment especially as construction workers, casual labour, labour working in brick kilns, and other informal sectors. This structural discrimination results in lower economic attainment not only as individual families but also as the community as a whole. In the 21st century, it becomes difficult to assess their economic wellbeing and it will be absolutely conservative to say that the condition of the tribals has marginally improved over the years.

As mentioned above, forests and hills are the house to the tribals. Right from the beginning their house requirements have remained very small/little. It is observed that it was only after independence, that tribal housing was taken seriously. Prior to 1947, these communities preferred to live in kutcha houses made of mud, sticks and husk. This is practiced even until recent times. It was only after the housing schemes for the tribals and those with no houses are beneficiaries of such housing schemes. there is enough data available now where one can conclude that such housing schemes have paved the way for better housing facilities to the tribals.

This paper attempts to investigate the systemic exclusion of tribals from accessing health from a most primary institution of primary health centers. While the said work was being carried

out in the districts of Nandurbar, Dhule, Nashik Raigad and Shahapur, initially the research scholar presumed that health is an independent variable and primary health centers were the dependent variables. That means, the interventions of the primary health centers are very important, not only from the point of health indicators, but also from the perspectives of access to general wellbeing.

However, as the study continued, it was realized that health is not an independent variable but is an dependent variable. When an extensive survey was conducted in some of the most inaccessible areas of Dab, Kathi, in Dhadgoan taluka of Nandrubar District or some of the nearest tribal padas from Mumbai, that is in Palghar and Thane districts, adjoining the most developed metropolis of India, Mumbai, it was observed that both access to health and access to food is trivial problem. It was also observed that there is a systemic failure to provide nutritious food to these communities. Most tribes in the state of Maharashtra sustain on the Dal Rice which is not just become their staple food but they have no choice of food other than the Dal and Rice and the Wheat that they get form the Fair Price Shops. In a way, the food habits of the tribals are governed by the government scheme of PDS under the Food Security Act.

In this paper however, the research scholar emphasizes the relationship between food and health parameters and mostly argue that to health is dependent on the access to food as mentioned above. Similar arguments are also made in various studies undertaken by the Government of India including the National Family Health Survey Round 4 and 5. For instance, the National Health Mission Special Report on the Tribals concluded the following, "the third round of the National Nutrition Monitoring bureau (NNNB) survey completed in 2008-09 found that the mean intake of most food stuffs and nutrients by the tribal people continued to be below the Recommended Daily Allowance (RDA) by the Indian Council of Medical Research and had in fact reduced over the years, across all age groups and for both genders"

"On an average, intake of cereal and millets decreased by about 50grms/cu/day between the second (1988-90) and the third NNNB survey (2008-09). The average daily intake of proteins decreased by about 3g/cu/day. The average intake of energy decreased by 150kcal/cu/day."

The same report reported that in terms of Malnutrition, the percentage of ST Children underweight has reduced from 54.5% in NFHS-3 (5005-06) to 42% in NFHS-$(2015-16). However, compared to other social groups, tribal children continue to be most malnourished. The prevalence of underweight is almost one and half times in tribal children than in other castes.

The research concludes that due to malnutrition (stunting among children, and low BMI among adults) in tribal people will continue to grow if interventions are not made by the government

at the right time. In Palghar area, the almost the entire population of both Madadeo Kolis and the Katkaris has resulted in stunted with low BMI population in the age group of 35-40 which will result in intergenerational degradation of the entire community. The scholar further maintains that intervention such as the participation of the civil society organisations must participate especially in terms of awareness towards the food intake and compulsory visits to the primary health centers in terms of any aliment. The work of Asha Workers is also considered to be of utmost importance to makes sure that the community health is recorded and appropriate curative and preventive measures are taken up.

While the survey was being conducted, large gaps were seen in the policies and their implementation. The policies that are implemented by the state, need to have an "convergence approach". Polices need not be perceived in an isolationist manner. They have to be integrated and converged to achieve the maximum welfare of the tribals in general and as this project is concerned about the state of Maharashtra, I could be more specific about Maharashtra. One of the most crucial convergence should be of National Food Security Act and the National Rural Livelihood Mission.

After seventy five years of independence too, the tribals seem to struggle for the sources livelihood. This problem has grown over the last 20 years or so. The reason no doubt is the structural adjustment programme of the Indian economy but also a rather slow pace and policies being implemented. Though there is no denial the fact, that the state has always remained more sympathetic to the tribals in terms of the policy formulation and policy implementation, the state has failed to counter and arrest the influence of the liberal economic systems penetration into the tribal societies. It is also true that one cannot escape the influence of liberal economic systems merely due to its gigantic nature and global expanse, the state should intervene with respect the building capacities of the tribals to face the challenges coming from the liberal economic systems.

The current policies of Ayushyaman Bharat etc. unveiled by the vision of Prime Minister must deepen to achieve the respectable measures of Human Development Index. There are many programmes that are geared towards such high aspirations for the people belonging to the tribal community. However, there is a need to bring in some sort of interventions to make health a Fundamental Right in the true sense of the term.

For the purpose of the discussion, the research scholar has included data from one district representing one region of the state.

Data Discussion

The survey data provided demographic details of the respondent:

1. Village
2. Grampanchayat
3. Tehsil
4. Age
5. Gender
6. Marital Status
7. Religion
8. Caste/Tribe
9. Education
10. Annual income

Of these, based on desktop research, it was perceived that 'Education' and 'Annual Income' could affect the way a person deals when feeling un-healthy and hence, they were considered to be variables to be tested for significant difference.

The rest of the data contained various details with regards to available healthcare facilities:

1. Distance of PHC
2. Transport availability
3. Doctor availability
4. Sister availability
5. Quality of food usually taken
6. Other Staff Availability (All responded "No")
7. Asha worker availability (All responded "Yes")
8. Anganwadi visit (All responded "Regularly")
9. Family Planning (All responded "Yes")
10. Immunization done (All responded "Yes")
11. Pharmacist Medicine (All responded "Yes")

We found that for some of the survey questions, all respondents had given the same response (as indicated in brackets above). Hence, those variables were removed from the analysis.

Thus, the below 7 variables were considered for the hypothesis testing:

1. Education
2. Annual income
3. Distance of PHC
4. Transport availability
5. Doctor availability
6. Sister availability
7. Quality of food usually taken

The responses to each of these variables was coded in order to be able to quantitatively analyze them for significance. Based on the survey questions it was understood that none of the questions were of the nature wherein a respondent would try to avoid it or suppress the actual answer. Hence, responses which indicated no opinion or lack of awareness to the survey question have been removed from the analysis[1].

The coding for the 7 variables thus, are as below:

[1] Krosnick, J. A., Holbrook, A. L., et al. (2002), "The impact of 'no opinion' response options on data quality. Non-attitude reduction or an invitation to satisfice?", Public Opinion Quarterly, 66: 371-403.

1. Education	
Primary (class V complete)	1
Upper Primary (class VIII complete)	2
Secondary (class X complete)	3
High School (class XII complete)	4
Above High School	5

2. Annual Income	
50,000	1
1,00,000	2
1,50,000 and above	3

3. Distance of PHC	
Within one KM	1
Within three KM	2

7. Quality of food usually taken	
Average	1
Sometimes good, sometimes bad	2
Good	3

4, 5, 6. Transport, Doctor and Sister availability	
Yes	1
No	2

Figure 1 - Survey questions – response quantification

4. Discussion of insights

The data has been collected across 17 tehsils. Analysis was done by each tehsil by each of the 7 variables trying to understand whether there is a significant difference between the means of the two samples (i.e. faced a diseased vs not faced a disease)

This would thus, help answer the question and test the hypothesis as to whether the presence and access to healthcare facilities between the 2 samples affected their well-being.

4.1. Importance of factors - Across all the tehsils

When the data is analyzed overall, the response towards the following factors are found to have a significant difference between the 2 samples of villagers vis-à-vis those who faced a disease vs those who hadn't.

Factor	**Responses from people who had <u>NOT FACED a DISEASE</u>**	**Responses from people who <u>HAD FACED a DISEASE</u>**	**Other Observations**
Education	No significant difference in the responses		NA
Annual income	No significant difference in the responses		NA
Quality of food usually taken	No significant difference in the responses		NA
Distance of PHC	Responders tended to indicate that they were <u>closer to the PHC (PHC for them was within 1 km)</u>	Responders tended to indicate that they were <u>farther from the PHC (PHC for them was within 3 km)</u>	The difference in response was also significant separately for only female responders across the 2 groups
Transport availability	Responders tended to indicate that they <u>have transport available</u> to go to the PHC	Responders tended to indicate that they <u>did not have transport available</u> to go to the PHC	The difference in response was also significant separately for only male responders across the 2 groups
Doctor availability	No significant difference in the responses		
Sister availability	Responders tended to indicate that <u>sister was not available at the PHC</u>	Responders tended to indicate that <u>sister was available at the PHC</u>	The difference in response was also significant separately for only female

	responders across the 2 groups

Table 1: Importance of factors - Across all the tehsils

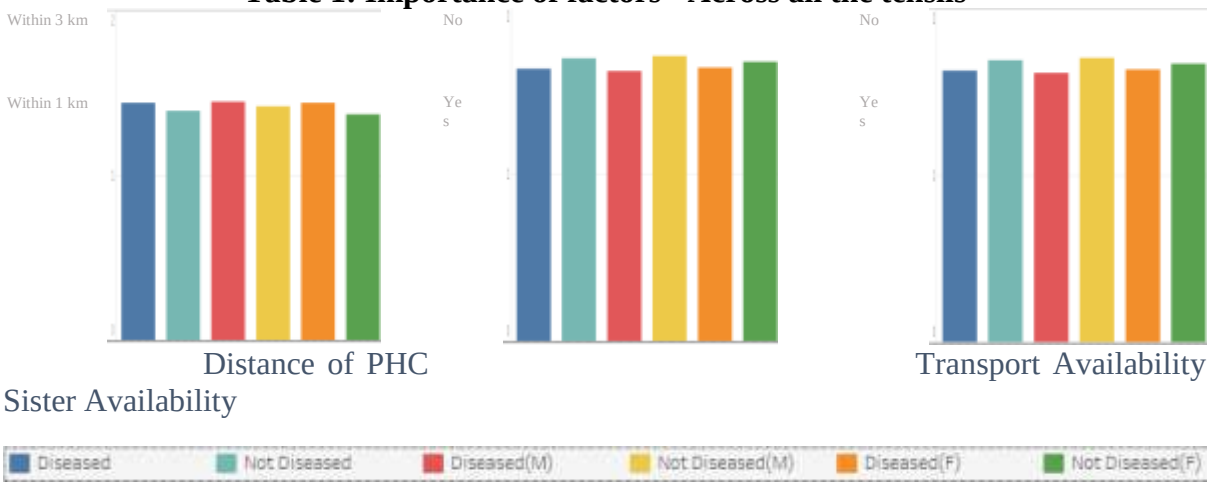

Figure 2: Average (value) of Responses from Respondents (All Tehsils)

4.2. Importance of factors – Tehsil Akkalkuwa (North Maharashtra)

When the data is analyzed for tehsil Akkalkuwa, the response towards the following factors are found to have a significant difference between the 2 samples of villagers vis-à-vis those who faced a disease vs those who hadn't.

Factor	**Responses from people who had <u>NOT FACED a DISEASE</u>**	**Responses from people who <u>HAD FACED a DISEASE</u>**	**Other Observations**
Education	No significant difference in the responses		NA
Annual income	Responders tended to indicate that they tended to <u>have an income of ~INR 1L and above</u>	Responders tended to indicate that they tended to <u>have an income of INR 1.5L and above</u>	The difference in response was also significant separately for only female responders across the 2 groups
Quality of food usually taken	Responders tended to indicate that they tended to <u>have food that was Good</u>	Responders tended to indicate that they tended to <u>have food that was sometimes good, sometimes bad</u>	The difference in response was also significant separately for only female responders across the 2 groups
Distance of PHC	No significant difference in the responses		The difference in response was significant separately for only female responders across the 2 groups with those who <u>had not faced a disease tended to indicate that they were closer to the PHC (PHC for them was within 1 km)</u> while those who <u>had faced a disease were farther from the PHC (PHC for them was within 3 km)</u>
Transport availability	No significant difference in the responses		NA
Doctor availability	No significant difference in the responses		NA

Sister availability	No significant difference in the responses	NA

Table 2: Importance of factors – Tehsil Akkalkuwa

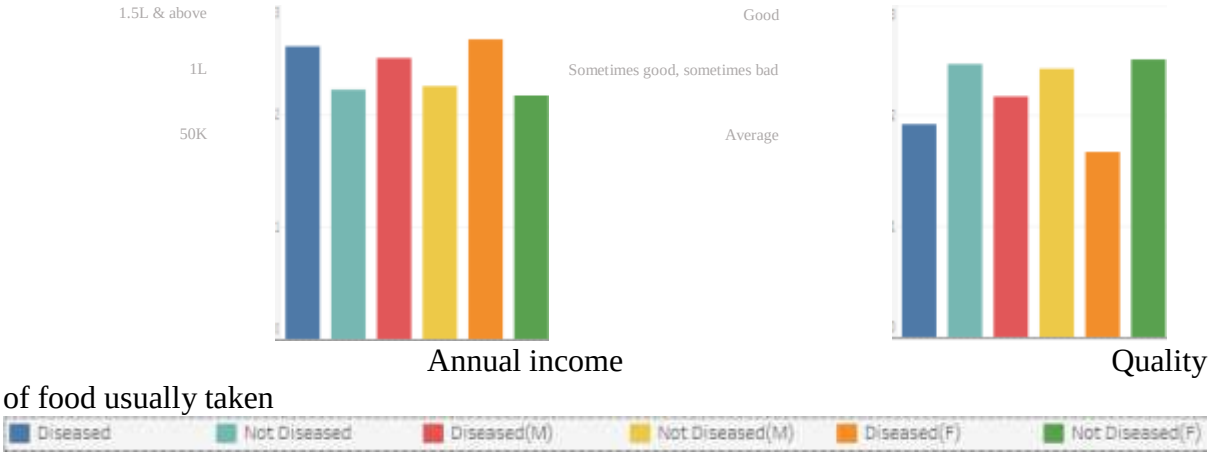

Figure 3: Average (value) of Responses from Respondents – Tehsil Akkalkuwa

4.3. Importance of factors – Tehsil Chikaldara (Vidarbha Region)

When the data is analyzed for tehsil Chikaldara, the response towards the following factors are found to have a significant difference between the 2 samples of villagers vis-à-vis those who faced a disease vs those who hadn't.

Factor	**Responses from people who <u>HAD FACED a DISEASE</u>**	**Responses from people who had <u>NOT FACED a DISEASE</u>**	**Other Observations**
Education	No significant difference in the responses		NA
Annual income	No significant difference in the responses		NA
Quality of food usually taken	No significant difference in the responses		NA
Distance of PHC	Responders tended to indicate that they were <u>farther from the PHC (PHC for them was within 3 km)</u>	Responders tended to indicate that they were <u>closer to the PHC (PHC for them was within 1 km)</u>	The difference in response was also significant separately for only female as well as male responders across the 2 groups
Transport availability	No significant difference in the responses		The difference in response was <u>significant separately for only male responders</u> across the 2 groups with those who had <u>not faced a disease tended to indicate that they have transport available to go to the PHC</u> while those who had <u>faced a disease tended to indicate that they did not have transport available</u>
Doctor availability	Responders tended to indicate that <u>doctor was available at the PHC</u>	Responders tended to indicate that <u>doctor was not available at the PHC</u>	The difference in response was also significant separately for only female and only male responders too across the 2 groups

Sister availability	Responders tended to indicate that sister was available at the PHC	Responders tended to indicate that sister was not available at the PHC	The difference in response was also significant separately for only female responders across the 2 groups

Table 3: Importance of factors – Tehsil Chikaldara

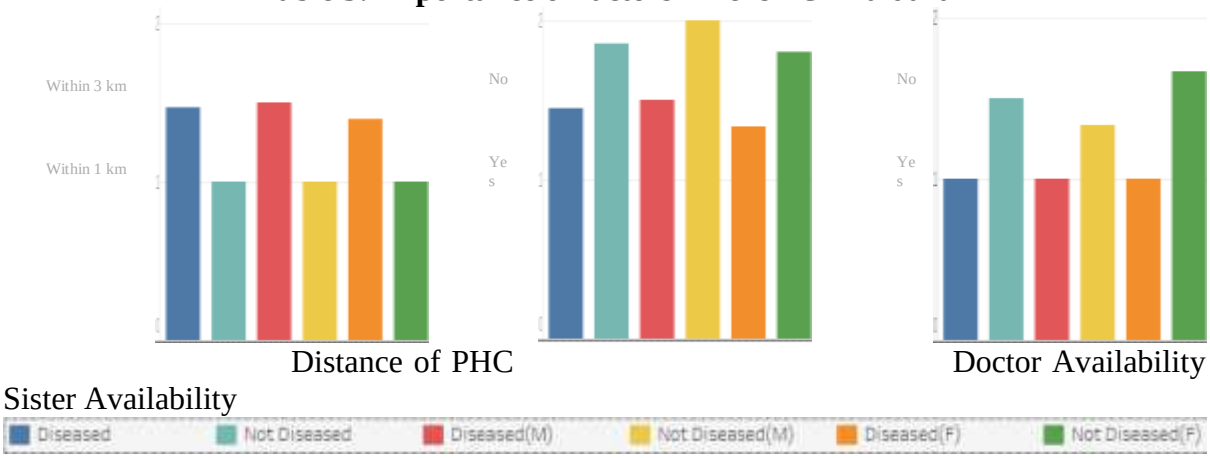

Figure 4: Average (value) of Responses from Respondents – Tehsil Chikaldara

4.4. Importance of factors – Tehsil Karjat (Konkan Region)

When the data is analyzed for tehsil Karjat, the response towards the following factors are found to have a significant difference between the 2 samples of villagers vis-à-vis those who faced a disease vs those who hadn't.

Factor	**Responses from people who HAD FACED a DISEASE**	**Responses from people who had NOT FACED a DISEASE**	**Other Observations**
Education	Responders tended to indicate that they had studied till High School	Responders tended to indicate that they had studied above High School	NA
Annual income	No significant difference in the responses		NA
Quality of food usually taken	No significant difference in the responses		The difference in response was significant separately for only male responders across the 2 groups with those who had faced a disease tended to indicate that they have food that was sometimes good, sometimes bad while those who had not faced a disease tended to have food that was Average
Distance of PHC	No significant difference in the responses		NA
Transport availability	No significant difference in the responses		The difference in response was significant separately for only female responders across the 2 groups with those who had faced a disease tended to indicate that they did not have

			transport available to go to the PHC while those who had not faced a disease tended to indicate that they have transport available
Doctor availability	No significant difference in the responses		NA
Sister availability	Responders tended to indicate that sister was not available at the PHC	Responders tended to indicate that sister was available at the PHC	The difference in response was also significant separately for only female and only male responders too across the 2 groups

Table 4: Importance of factors – Tehsil Karjat

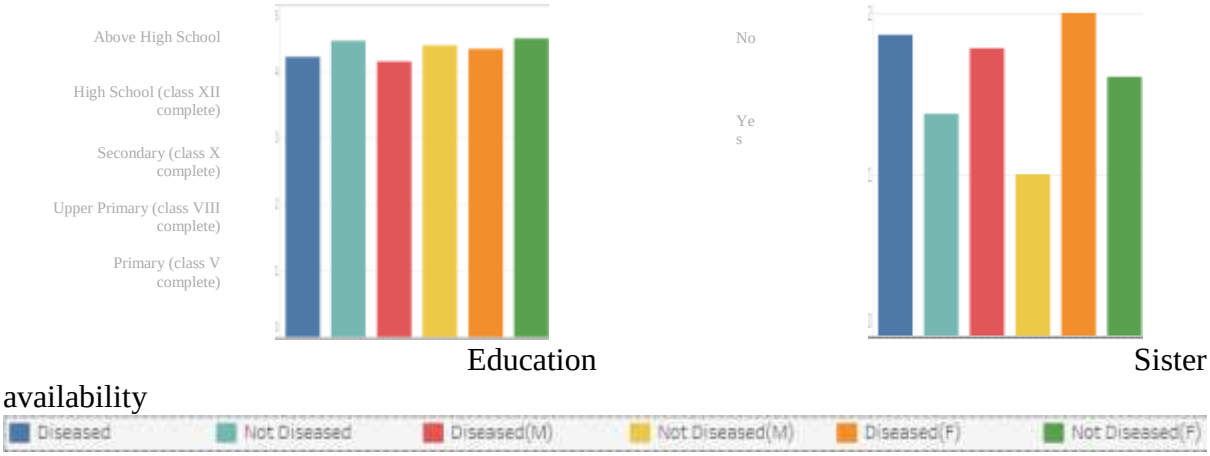

Figure 5: Average (value) of Responses from Respondents – Tehsil Karjat

4.5. Importance of factors – Tehsil Kinwat (Marathwada Region)

When the data is analyzed for tehsil Kinwat, the response towards the following factors are found to have a significant difference between the 2 samples of villagers vis-à-vis those who faced a disease vs those who hadn't.

Factor	Responses from people who **HAD FACED a DISEASE**	Responses from people who had **NOT FACED a DISEASE**	Other Observations
Education	No significant difference in the responses		NA
Annual income	Responders tended to indicate that they tended to have an income of ~INR 1.5L and above	Responders tended to indicate that they tended to have an income of INR 1L and above	The difference in response was also significant separately for only female responders across the 2 groups
Quality of food usually taken	Responders tended to indicate that they tended to have food that was sometimes good, sometimes bad	Responders tended to indicate that they tended to have food that was slightly better than Average	The difference in response was also significant separately for only male responders across the 2 groups
Distance of PHC	Responders tended to indicate that they were farther from the PHC (PHC for them was within 3 km)	Responders tended to indicate that they were closer to the PHC (PHC for them was within 1 km)	The difference in response was also significant separately for only male responders across the 2 groups
Transport availability	No significant difference in the responses		The difference in response was significant separately for only male responders across the 2 groups with those who had faced a disease tended to indicate that they did not have transport available to go to the PHC while those who had not faced a disease tended to indicate that they have transport available
Doctor availability	No significant difference in the responses		The difference in response was significant separately for only female responders across the 2 groups with those who had faced a disease tended to indicate that doctor was not available at the PHC while those who had not faced a disease tended to indicate that doctor was available at the PHC
Sister availability	No significant difference in the responses		NA

Table 5: Importance of factors – Tehsil Kinwat

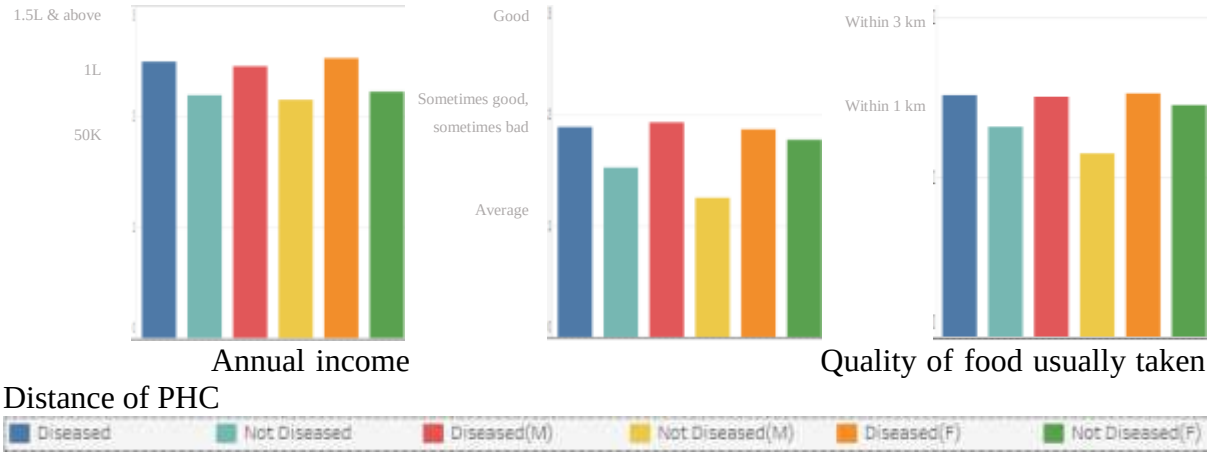

Figure 6: Average (value) of Responses from Respondents – Tehsil Kinwat

Conclusion

The above research indicates that there is a need to strengthen the primary health centres in India and specifically Maharashtra. The service that they are providing at this point is the basic services and there is hardly any effort towards wholistic access to health. The above data shows that the PHC can is effective only in three kilometres of radius which keeps some basic health issues at bay. However, when it comes to more sever ailments, it is difficult for the people in the tribal areas to have access to the same.

The Anganwadi and ICDS programmes which generally are supportive to the PHCs have plays in important role in bringing the tribals to the PHCs. Programmes such as Janani Suraksha Abhiyan and the like are considered to very successful which gives the vulnerable women access to better facilities without any cost.

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