The Contested Medical Pluralism; Environment, State and the Indigenous Healthcare in West Bengal

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Abstract

At the policy level it has been thought that National Rural Health Mission could take care of 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO, 2019) of all the indigenous population in this country. But as per the report submitted to the Ministry of Tribal Affairs, it has been found that the condition of healthcare is very poor among indigenous people. The expert committee extended the suggestions to give special attention to these people as per their ecology (Bang, 2013). But a close reading of the report ensures a contradiction; like the subtitle 'bridging the gap and roadmap of the future' of this report ensures that more emphasis has been given to promote the 'mainstreaming' of the healthcare system of the tribal people while ignoring the ecology of 'Jaal, Jangal and Jameen' (water, forest and land), destroying the rich tradition of 'Indigenous Healthcare System'. In this context this paper explores the contestation between the public healthcare and indigenous health care system among tribals of West Bengal. Through a mixed method approach, an attempt has been made to understand a social ecology where surrounding jangal was always part of their healthcare system. During In-depth interviews with Janguru (Healer) and Sardars (Chieftains) of 'Santhals' of Ausgram Block of Purba Bardhaman district we have found mainly two kinds of contestations, firstly between Public and Traditional System of health care, secondly imbalance of ecology. We have found due to the progressive social ecology the Santhals were far away better than the non-tribals in terms of various demographic health indicators; for example in 1881 the out of 100 female in the age group of 20-24 unmarried females in the Santhal society was 13 comparing 7 in the non-tribal society. Child Sex ratio is also higher among tribals. To impose the health hegemony British started its first dispensary in Ausgram as early as on 18th Sepetember 1805. Now in spite of dominant presence of traditional healers only 4% of the household have faith on the indigenous system. The answer lies in the disassociation of the tribal from their traditional ecology and role of 'state' to promote western medicine. Somehow in this study we have used 'healthcare' as an analytical framework to understand the larger question of 'contested territories' of Environment, State and the Tribal Society.

Keywords: Environment, Indigenous Healthcare, Medical Pluralism, Santhals, Tribal Healthcare system.

Introduction

This paper begins with the discussion of Satyajit Ray and his film 'Aguntuk', where he depicts the contradiction and perception of the tribal population through a dialogic conversation between Mr. Sengupta (Dhritiman Chatterjee) and Mr. M. Mitra (Utpal Dutta); where former represented the view from the colonial mentality and following represented the alternative subaltern view. The colonial, the so-called modernized Mr. Sengupta had asked Mr. Mitra while asking about the modern world,'

Apni oi Jonglee der sathe bas korechen (had you lived with those barbaric people)?' This interaction is portrayal of views of so-called mainstream society about tribal counterpart. Interestingly, while replying to Mr. Sengupta, Mr. Mitra reminded that tribal people also have their indegenious science and technology, '*Ekti pornokutir o stapotter sakhyo bohon kore, igloo toiri korte j dui dhoroner borof lage seta aprana janen* (one hut can also be an example of architectural genious. Do you know that to make an igloo two different types of ice are used)? Being critical, Mr. Sengupta asked Mr. Mitra wheather he will call an *ojha* or a doctor when needed? Satyajit Ray with his craftsmanship represented the ethnic traditional medical knowledge of tribes and therefore Mr. Mitra had replied, "*ekbar badhya hoye ojha k dekechilam, but o kemon ojha janen? 500 joributir gyan tar nokhodorpone* (once I had to call an *Ojha*, but he had a knowledge about five hundred medicinal plants)" (Ray, 1991). So, the question is whether the so-called modern civilization has everything or tribes have a lot in their traditional knowledge system? It is not easy to take all the aspects of this debate. This paper tries to unfold the debate in terms of health, health systems, health ecology and finally, the traditional medical knowledge in the crisis about the identity of tribes as depicted in the film. This study lies in the junction of the two dynamic components that dramatically changed their academic discourse- 'Tribe' and 'Health'. This paper tries to find out the changing nature of these two components and at the same time, their inter-relationship. Apart from that the current study tries also to add a spatial dimension as we ask how did the 'space' shape both 'tribe' and 'health'?

Etymologically, the word 'tribe' means a group having its root in the Latin word 'tribuz'. British anthropologists have associated new cultural features with this word. According to them, 'tribe' is a group of people with common cultural identities, economy, and language. Romans equate 'tribes' as political groups while Greeks consider them as 'fraternities' with geographical isolation (Chattopadhyay, 2014). This concept of geographical isolation can be found in peopling process in Indian Sub-continent. According to Subbarao (1958), there were three regions which were resulted from the in-migration of Aryan people. The first region is the 'Perennial Nuclear Region', the most recent formation where the last in-migrants reside, mainly the relatively productive and convenient places like the river valley. They identify themselves as upper-caste. The 'Relative Isolated Region' is the second region, which is relatively less productive and less convenient. Today, the inhabitants of this second region are called the so-called lower caste, who resides beside the upper castes to serve them. The third region is called the 'Isolated Region', mainly geographically inaccessible places like the deep jungle of Central India and mountainous regions of Northern Himalayas. Subbarao (1958) described them as the original inhabitant of this Indian sub-continent or 'Adivasi'. In the Indian context, the concept of tribe is somehow related to geographical isolation. This geographical isolation factor is the primary catalyst in the politics of tribal identity and its representation. Colonizers were British people first who came into the ground and termed them as 'barbaric' and 'uncivilized'. The Britishers attempted to civilize tribes into the mainstream society. British anthropologists surprisingly sometimes represented on the academic front as the monster to society. This attitude of the Britishers was highly colonial, and they tried to prove the racial supremacy (Beteille, 1986). They have not only criminalized the tribes but also criminalized their lifestyle, their indigenous traditional knowledge system, including the health system. In the book 'Colonizing the Body', Arnold (1993) depicted the process of demolishing of traditional knowledge system and imposition of western medicinal practices. The Britishers have also appropriated some of the traditional medical knowledge. The cinematic representation of tribal people is evident of the colonial hangover. It was the politics of representation of tribes. To trace the roots of this isolation politics, even the Government of India identified the scheduled tribe by considering the spatial isolation and its geography. Discussions around this spatial isolation is essential for the health status from two main perspectives. This paper tracks the positivity as well negativity which comes from colonial legacy. The positive aspect of spatial isolation is the unique 'Health Ecology', which is produced in indigenous health practices, traditional medicinal knowledge, and the 'Adivasi' health behavior. The negative aspect of this

spatial ecology as argued by the colonial anthropologists that spatial isolation reduced the access to health care facilities of the tribal population. In this attempt, their indegenious health system have been ignored. This paper tries to unveil this changing relationship between spatial ecology and the status of health of the tribal, especially *Santhal* in Ausgram block.

Against this backdrop, the primary objectives of this paper are to understand the status of the health, accessibility of health care infrastructure and indigenous knowledge of health and medicine among the tribals, especially among *Santhals* in Ausgram II Community Development block of Purba Bardhaman district.

Methodology

This study has been carried forward on two levels. At the first level, data has been collected from secondary sources such as Primary Census Abstract of Auagram-2 C.D Block and District Statistical Handbook 2014. But these data sets lacked information on the health status of the Scheduled Tribe, which is the leading research interest. So, in the next level, the household level primary survey was carried out in May 2018. Out of four tribal-dominated villages total of 52 households had been interviewed with an interview scheduled which were on the broader lines of maternity and child health, access to basic health facilities, the pattern of morbidity, disease pattern etc. The last 365 days had been adopted as the reference period. Local health centers and hospital visits have also been done to understand the ground reality. Doctors and health workers have been interviewed with semi structured interview schedule. In this study, mainly quantitative analysis like, descriptive statistics has been used to analyze the data, and then data has been represented with various cartographic techniques. To find out the indigenous knowledge among the tribals, the content analysis method has been employed to collaborate the field observations and informal discussions with villagers.

1. Demographic nature of the region

Explaining the tribal health should always start with the people and their ecology. Bardhaman district is the third largest district in West Bengal with total of 7,717,563 population with an average population density of 1099 persons per square kilometer. The district has also a decadal growth rate of 11.92 per cent (Census, 2011). 150896 population resides in the Ausgram-II C.D. block which is 1.96% to the total population of the district with decadal growth rate of 10.74 per cent. The historical episodes of infamous 'Burdwan Fever" outbreak in 1862 reduced the total population of the district. Peterson (1910) attempted a detailed historical account of population growth in different census periods of the district.

Table 1: Population of the Bardhaman District (Peterson, 1910)

Year	Population in numbers
1813	1444487
1872	1486400
1881	1394220
1891	1391880
1901	1532475

In this historical account, Ausgram has been identified as low density zone because the region had a lower carrying capacity due to its dense forest, laterite soils and lack of mines to support people (Peterson, 1910). But census, 2011 reported a population density of the Ausgram II block is around 418 persons per square kilometer. The present moderate population density of the block is due to massive agriculture and peopling of migrant population after partition of India.

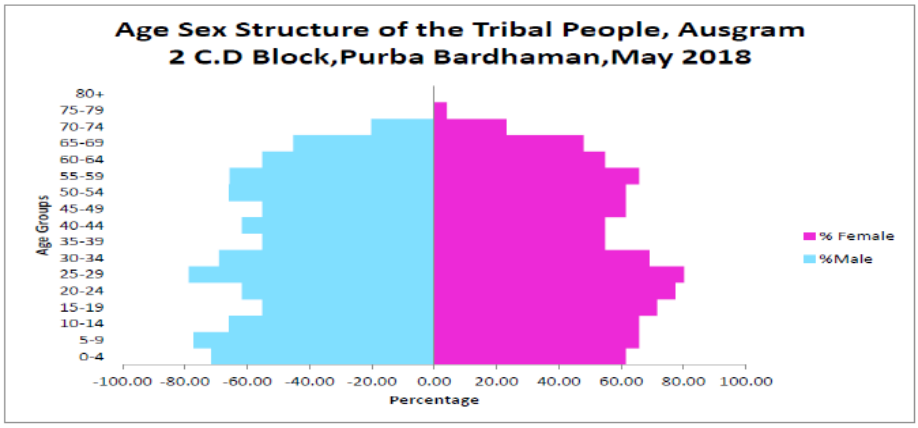

Figure 1: Age-sex structure of the surveyed tribal household of Ausgram-II, (Field Survey, 2018)

Age-sex structure of the tribal calculated from field collected data and assigning weight as percentage of population to total population of 0.161 for males and 0.165 for females clearly indicates a bell-shaped pyramid which is a sign of progressive nature of the tribal society. The fertility and mortality of different age group is related to health as well as socio-cultural factors. The pattern of fertility observed in the tribal society is low when compared to non-tribals. It can be attributed to mainly two factors of marriage pattern and gender empowerment. Tribal people are mature in family planning. According to the tribal practices, women enters late to the marriage union which reduces their reproductive span. Automatically, the chance of new baby gets minimized (Risley, 1901; Chaudhury, 1986). It has been found that in some cases, girl prefers to marry younger boys. Higher age of female results into shortening of the period of reproduction (Basu, 2000). Risley (1901) has also given empirical evidence (Table 2) in his works and noted that the girls are mostly married to men to their own choice and sexual intercourse before marriage was tacitly recognized. Another point is the women autonomy. If women had their own say during reproduction then the situation would have been much better in the non-tribal society.

Table 2- Historical evidences (Risley, 1901)

Years	Unmarried Female up to age 20-24	
	Tribal	Non-Tribals
1881	7	2.5
1901	13	2

The sex ratio of tribal is 978 females per thousand males which is higher than 951 females per thousand males in non-tribal society. It exemplifies that tribal society gives respect to the females too. In non-tribal society it is the male preference which results into the lower sex ratio. Tribal societies do not associate gender issues with economic benefits. So the discriminatory behaviors are not prevalent in the tribal societies.

2. Indigenous Health system and its transformation

Every ethnic community has their own history which is carried forward from generation to generation, with oral histories, popular memories and folk culture. To know the history of the *Santhals* we have focussed on the myths and popular legends of their society. Their story is related to the series of migration to various places in different phases of history. In the fourth section of a pioneering book on Tribal Health in India, edited by Salil Basu, deals with the interaction between traditional and modern medine system among different tribes of India (Basu, 1994). The works of (Chattopadhyay, 2014) talks about the *Santhal* legend where a natural calamity destroyed all the population of their community and only one couple survived. This incident took place at *Hihiri Pipiri* which was their original habitat. This incident is known as *'Jug Sengel'* which is believed to have occurred at the

bidding of Thakur, their supreme deity. The survived couple have saved the community from vanishing and helped to grow again. Thereafter they had shifted to the bank of a river called *Sasangbera*. According to *Kolean Guru*, from *Sasangbera*, the Santal community went further to Japri where they have encountered with the great mountain popularly known as *Marang Buru*. The journey continues to Champa via Kendi and Chae. At Champa, they had left some cultural imprint by making some '*garhs*' to protect themselves from enemies. The style of the different *garhs* was different as per the community was concerned. Khairigarh, Koindagarh, Champagarh, Badligarh and Simgarh were built by Hembrams, Kiskus, Murmus, Mandis and Tudus respectably (Chattopadhyay, 2014). The typical *Santhal* cultural prominence came from the residence period in the Champa like some prominent deity like *Marang Buru*, *Moreiko* and *Jaher Era*. But finally, this stay at Champa got shorten by the incursions from the Hindus and they followed to move to Saont (modern Silda at Midnapore). Here *Santhals* had managed to stay nearly up to 200 years. But again they moved further towards Panchet and Manbhum region which is popularly called as 'Santhal Parganas'. The cause of movement was due their chief cheated them and adopted Hindu Religion and a Rajput name. He even patronized the Brahmans and made extensive land grants to them (Chattopadhyay, 2014).

History reveals the close relationship between forest and tribals. Therefore the tribal medical system was dependent on the use of ingredient of forest element. They were using it from a very long time. But it got disrupted during the British period. In Ausgram, Britishers had introduced a dispensary on 18th September, 1805. It had served total 6854 patients with a daily average of 47.65 patients (Peterson, 1910). Thus colonial medicine had broken the strength of the indigenous medicine system. Allopathic medicine yielded a quicker relief, so it became famous within a few days. These narratives were also collaborated on ground. In earlier days there existed a belief that diseases and calamities occurred due to god's anger or evil spirit. Therefore they used to heal the disease with various religious and magical practices. These practices were conducted by village priest, folk practitioners (*Ojha*) and medicine–men (Jan-Guru) (Chattopadhyay, 2014). The *santhals*, to some extent extricate themselves from such superstitions, beliefs, and practices. Due to spread of colonial education and contact with modern health centres, tribal beliefs in the efficacy of their traditional means of curing diseases have considerably decreased. We received a very less response during field survey who still believes in those practices. Some of them do use today also, but first they go to health centre, if not cured in a long span of time then they go for such places. Only 4% people now in Ausgram believe in those medical practices and rest do not believe at all. But Jan-guru and *Ojha* still exists in villages. Studies in Midnapore by Chattopadhyay (2014), reveal the opposite picture where people approaches the *Ojha* first in case of small injuries and diseases. Then if it gets serious then they approach to the health centre. We have not found any interest in restoring the traditional knowledge system of medicine among the tribals. There is hardly any attempts taken by the community to preserve or document the value system. Village elderly people still know something about their age-old knowledge about medicine. But they also believes that those are not as effective as the allopathic medicine. British introduced medicine system has taken over the whole market and belief system. Up to this it was just the outcome. Why and in which circumstance the tribal people start disbelieving a system of medicine which was indigenous? The whole process can be explained by two processes one is socio-environmental ecology of health and political ecology of health. Upon careful investigation, it can be found that the basic structure of the society has not changed at all, because still each village had their *Ojha* and Jan Guru. So the social ecology of health remained unchanged. But what changed is that the environmental ecology. The core inhabitant called '*damini-koh*' has faced massive deforestation for various developmental aspects, agricultural land expansion. Thus political decisions like road, railway network development or sedentary agriculture caused massive deforestation and reduced the supply of the raw materials of those medicines. In this crisis, government came with solution of allopathic medicine which provided a faster relief mechanism from illness. They established dispensaries. Thus, tribal traditional medicine had suffered from dual crisis. Though social ecology remains unchanged,

the political ecology of health changed the health care system in tribal society.

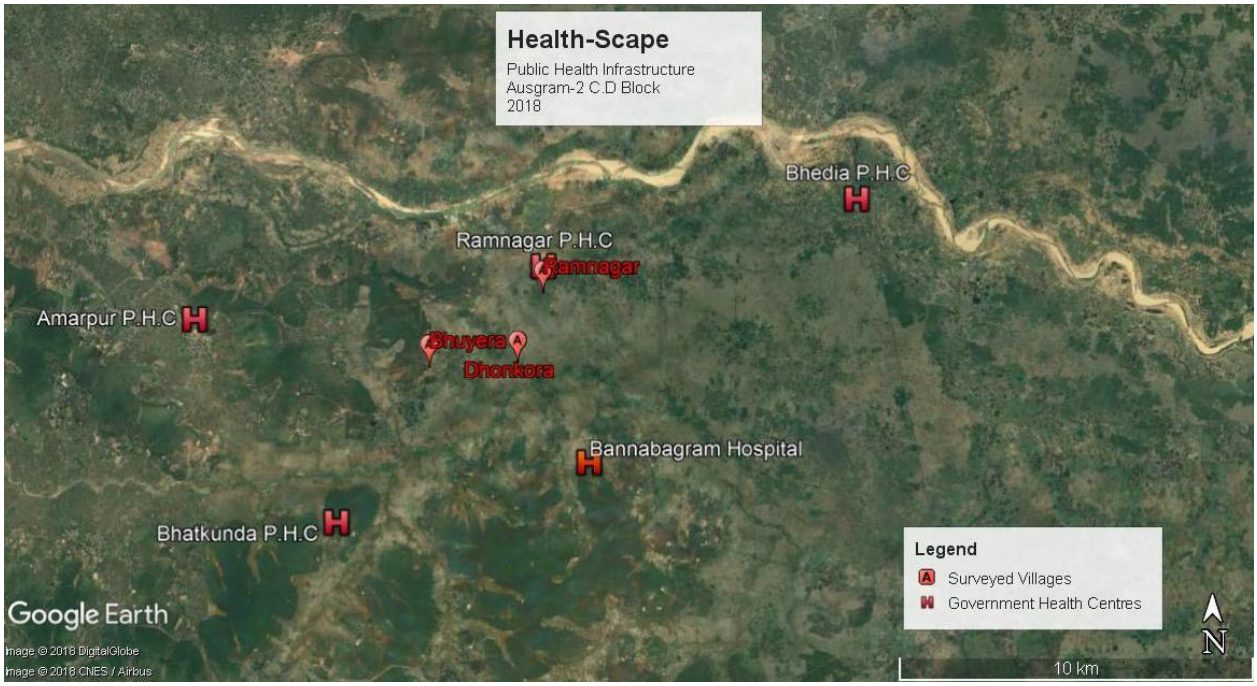

Figure 2: Health care centers and surveyed villages location

In health care delivery system, there are three forms of medicine system at three scales. The three forms are preventive health, curative health and promotive health. These mechanism works at different scales; at primary level, preventive and curative health; at secondary level curative health and at the last level only promotive health. There is a huge academic and policy level debate regarding their scale of operation.

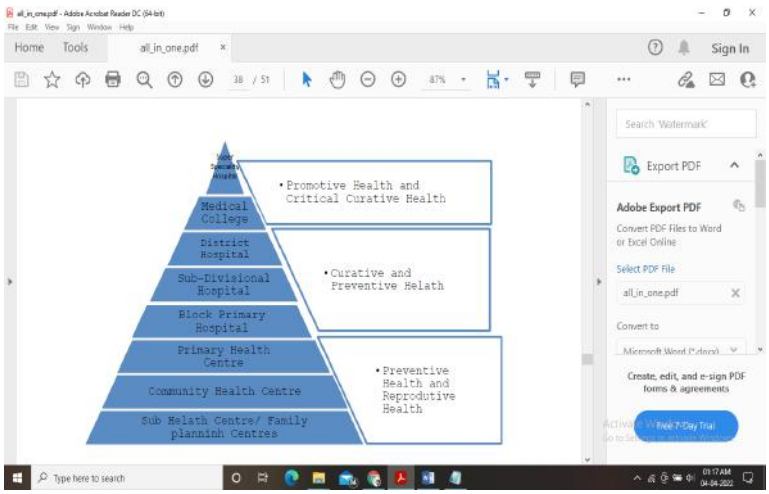

Figure 3: Health System (Rao K. S., 1998)

Most comprehensive recommendation had come from Sir Joshep Bhore, in Bhore committee report (1946) it was suggested that in the tribal region in every 3000 population a sub-health center and every 20000 population a primary health hospital should ne build (Rao K. S., 2016). The sub-center and primary center will take care of the immunization, reproductive health and family planning. After Independence, many health committees have been formed, all of them had followed the basic Bhore committee structure. Some addition took place like introduction of Accredited Social Health Activist (ASHA) workers, training to the '*Dhais*'. To understand the structure of healthcare delivery system and accessibility of the public health care delivery system we need to assess it. As it is called a system, so it has inputs and outputs. Inputs are health infrastructure and health workforce and output

is health outcome. Here our focus will be on health input and utilization of health care services by the people.

Table 3: Public Health Institutions in Ausgram II

Public health Institutions	Numbers
Community Health Centre	9
Primary Health Centre	20
Primary Health Sub Centre	31
Maternity And Child Welfare Centre	22
Hospital Allopathic	12
Hospital Alternative Medicine	10
Dispensary	21
Family Welfare Centre	14

(Source: Census, 2011)

Table 4: Public health workforce and its lacuna

Indicators	Strength	Actual Position	Gap	Percent Gap
Primary Health Centre Doctors	14	7	7	50
Primary Health Centre Para Medical Staff	41	23	18	43.90
Primary Health Sub Centre Doctors	10	3	7	70
Primary Health Sub Centre Para Medical Staff	52	26	26	50
Maternity And Child Welfare Centre Doctors	4	2	2	50
Maternity And Child Welfare Centre Para Medical Staff	40	37	3	7.50
Hospital Allopathic Doctors	9	7	2	22.22
Hospital Allopathic Para Medical Staff	30	12	18	60
Hospital Alternative Medicine Doctors	5	5	0	0
Hospital Alternative Medicine Para Medical Staff	8	6	2	25
Family Welfare Centre Doctors	1	0	1	100
Family Welfare Centre Para Medical Staff	19	15	4	21.05
Dispensary Doctors	4	0	4	100
Dispensary Para Medical Staff	13	12	1	7.69

(Source: Census, 2011)

There is a huge gap between the strength and the actual position in most of the public health care centers. This C.D block is lacking doctors in the family welfare centers by 100%. This is serious lack of public health infrastructures and workforce too. It results in poor health out-come. When Government fail to facilitate with such basics of health then market or private sectors comes into picture. The irony of India is that the deficit of MBBS well trained doctors in public health centers

is compensated by this traditional practitioner and faith healers. People still believes in such things. The huge number of such alternative medical practice is may be due to the less accessibility because of dense forest land in the block and inadequate workforce in the public infrastructure. But in our study only 4% people had belief on the curative aspect of alternative medicine. Out of rest 96% has a pattern of choosing the hospital pattern. But all the villagers were satisfied with the service provided by Bonnabagram Block Primary Health Centre.

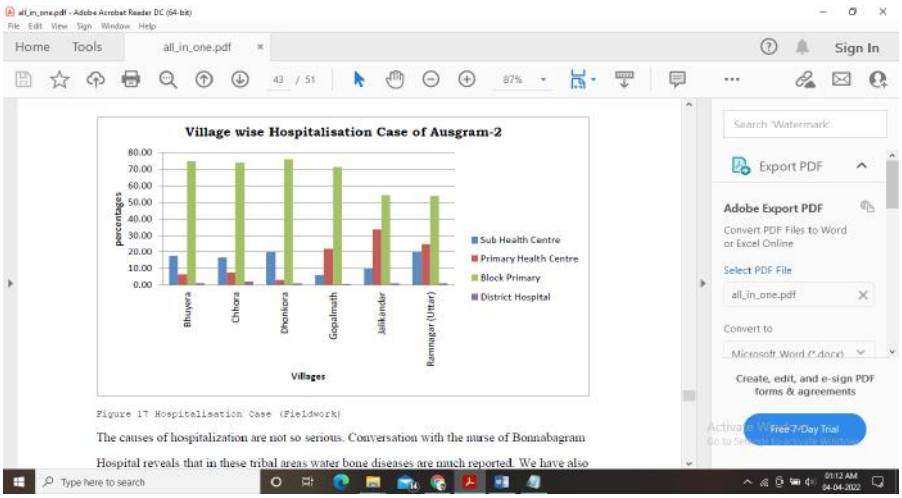

Figure 4: Hospitalization cases in different Health centers (Field survey, 2018)

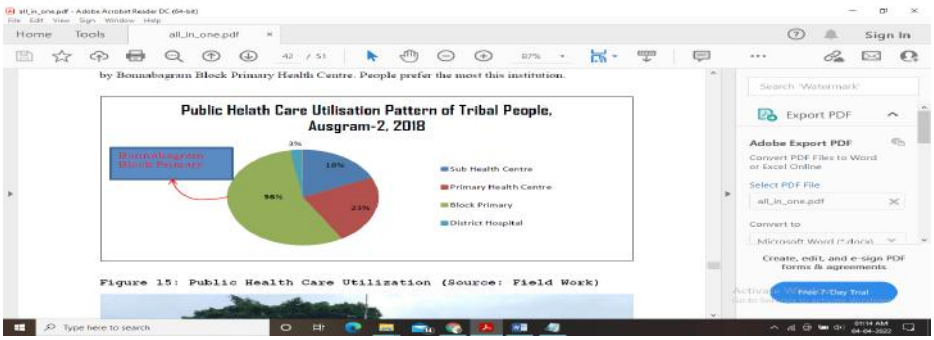

Figure 5: Public Health care utilization by tribals of Ausgram II (Field Survey, 2018)

Conversation with the nurses of Bonnabagram Primary Hospital reveals that people of the tribal areas mostly suffers from water borne diseases. Field survey also found that only 0.3% household treats their water before drinking. Open defecation is an serious issue in spread of infectious diseases like Diarrhoea, Cholera out breaks after the rainy season. Besides, life style diseases mainly liver cirrhosis due to consumption of alcohol cases are on the rise. In their traditional medicine system, People get medicinal plants from forest but in some instances the lack of indegenous knowledge of the dangers in the forest led to accidents and bad health. During our survey, one reported that one little girl went with her mother to collect leaves but due to some unknown spider bites and her finger had to operate. It is also the ecology of disease.

Table 5: Non-governmental health institutions in the region

Non- Government Institutions	Numbers
Out Patient	3
In And Out Patient	5
Charitable	11
Medicine Shop	7

Practitioner with MBBS Degree	23
Practitioner with other Degree	40
Practitioner with no Degree	4
Traditional Practitioner and Faith Healer *Ojha/ *Jan Guru*	35

(Source: Census, 2011)

3. Women and Child Health

Reproductive health of women starts with the menstrual cycle. Menstruation in Indian society is considered a taboo, so as menstrual hygiene. But ASHA workers have been a successful agent to deliver the knowhow of menstrual hygiene. With their efforts and government goodwill, around 68% of the tribal girls are using sanitary napkin during their menstrual periods. Rest 32% is using traditional methods. Even then ASHA workers attempted to ensure 100% use of sanitary napkin among the females.

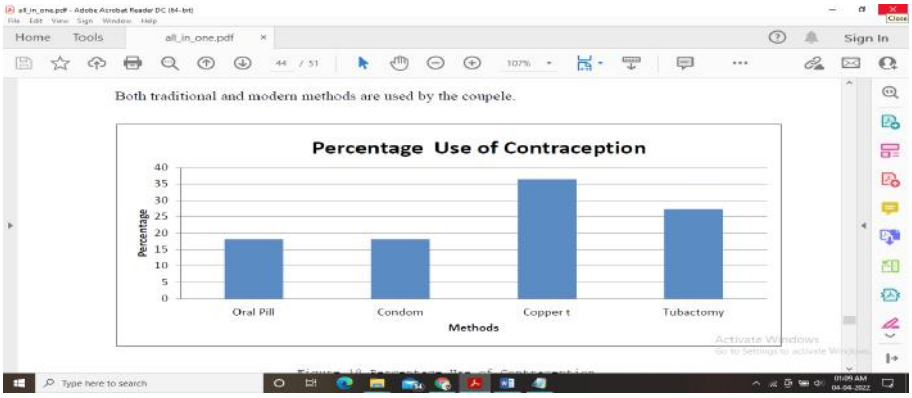

Figure 6: Contraception prevalence in the region (Source: Field Survey, 2018)

Use of contraception by the couples includes both traditional and modern methods. 'Copper-T' is very popular among them. It is a semi-permanent solution for 6-10 months. ASHA workers tried to generate awareness about the importance of different birth control measures. Female went to their nearby health center and get things done. Apart from this, permanent birth control method of tubactomy is also popular. Oral pills and condoms are supplied by ASHA workers when needed. Here most of the birth delivery was carried out at government hospitals. People were also aware about the Janani Suraksha Yojana.

Table 6: Place of delivery

Places of Delivery		Percentage
Institutional	Government	95.25
	Private	0.5
Non-institutional	Home	4.26

(Source: Field survey, 2018)

Table 7: Deliveries under Institutional Delivery

Type of Institutions	Percentage
Sub-Health Center	1
Primary Health Center	4.15
Block Primary Health Center	91.51
District Hospital	3.34

(Source: Field survey, 2018)

More than 90 percent of total birth delivery is normal delivery in this region. Pre and post-natal care is supervised by ASHA workers. ASHA workers ensures institutional delivery which reduced the chance of maternal mortality in the region. We have not came across any issue of maternal mortality in villages. ASHA workers are bridging the gap between the government policy and target groups (Chaudhury, 1986; Rao K. S., 2016). A total of 9 community health centers, 20 PHCs, 31 sub-health centers along with 22 maternity and child welfare centers with the help of ASHA workers have been made accessible to every pregnant women. The knowledge and practices of pre-natal care for mothers are also given by these ASHA workers. The Janani Suraksha Yojana provides ambulance services at time of going to hospital. So the maternal mortality rate is very low in that area. But studies have shown that perception of community plays more critical role than these mechanism. ASHA workers has bridged that gap between the perception and awareness. The whole process got institutionalized, so the child is also registered immediately. The child can go through full immunization. Initially a section of society was against the polio vaccination but later taken into confidence. 98% of child was brought under immunization program in the region. The tribal children of this region suffers from fever, fluxes, cough, diarrhea along with malnutrition and stunting. Physiologically belly got unusually floppy in these children due to the enlarged plea by not taking proper food. A study by Gopalan (1994) showed that poor fatal growth has been attributed to widespread maternal under nutrition. One third of babies born in India are of low birth weight and this contributes to a major public health problem. In 1996, Govt. of India's micronutrient task force estimated that 88 million pre-school children are at risk for vitamin-A deficient. Akhtar (2013) showed vitamin-A deficiency among children which varied from 12 percent to 58 percent of severe & moderate vitamin-A deficiency respectively. This condition is lower in the general or upper caste people but in the scheduled caste and tribe population that condition is very higher (Gopalan, 1994).

Conclusion

The study shows the concept of health and tribe coincide with each other and evolve around the politics of identity. Ecology plays an important role in redefining these dynamics. Through this paper the stringent notion tribe has been challenged. This study targeted the colonial notion of tribe and its representation. The study argues that the social ecology of Health system are still present in the tribal society; *ojha and janguru's* existence. But its political ecology has undermined their presence and appropriated the traditional medicine system. Here Health is cultural as well as political too. It tries to show how politics has determined the behavior of a social group. This understanding has proven empirically and theoretically how community feelings can be channelized more positively in determining maternal health. It is very unfortunate to see 100% gap in the health workforce in some cases. This gap is not only liability to the society but it is the gateway to private market players comes into picture. Those non- government sectors merely poses any proper training to make treatment which makes them much vulnerable. The study also found the contestation of territories between traditional system of medicines and the western medicines in the tribal society. The spread of western medicines has led to the disassociation of the tribal from their traditional ecology and environment due to promotion of western medicines by the 'state'.

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