

Dissertation on Prevalence of TB in the Tribal Population of Assam

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Submitted by

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Declaration by Student

I hereby declare that this dissertation titled “**Prevalence of TB in the Tribal Population of Assam**” is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

(Signature)

Name of Student

Date

Acknowledgment

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Abstract

Background-:

Tuberculosis is one the of the highest deadlly diseases. It is also known as the “complaint of poor”. India has the highest month-to-month prevalence of TB in the world. In addition to bio-clinicals and danger elements, of openness to TB onset and post-openness products in a population. Since the restorative tuberculosis control program has not been successful in controlling TB, growing graves in TB control recommend additional emphasis on intervention based on social determinants as a reciprocity to the authority. Although there is a TB monitoring medium in Assam, the ethnic population has . This study looks at threats and social determinants in ethnic Assamese which may help in policy planning for the control of TB.

Purpose-:

The main focus of this paper is on the risk of exposure to TB complaints and infection. The next theme, rooted objects, can divide the primary ideal.

Examine the such as Smoking, Alcoohol Connsumption, Healthy Habits, Workiing Conditions, and Living Conditions

the Ethnic of Assam using primary data

Examine, specifically with regards to TB, people's perceptions and actions regarding, views, treatment preferences, , and mindfulness

Debate the discoveries with the help of explicit writing on the medical problems of the ethnical population of Asam out the holes in data on the friendly, explicitly of Assam using the available worldwide writing on the subject.

(iii) Materials and styles-:

The study uses data from a primary field investigation to focus. Literature on population of Assam, particularly with regard to complaints, life, and living conditions, among other topics, serves as secondary data. have been significantly used to prove the essential information. To fill in the knowledge gap regarding the social determinants of TB in the ethnic population of Assam, international literature on TB and TB has been published.

(iv) End-:

Examination of TB control programs across the world prompts an idea that for feasible control of TB, the supportive mediations need to remain inseparable with safeguard intercessions that are probably going to lessen individuals' weakness to TB contamination and protest. Both upstream and downstream social determinants of vulnerability are addressed by interventions. Consequently, the study focuses on threat and social determinants relevant to TB prevention. Since targeted interventions in the ethnic population of Assam have failed to stop the spread and prevalence of TB, the possibility of controllin TB without addressing the as preventative measuress seems unacceptable.

Chapter -1

Introduction

Piramal Swasthya

Piramal Swasthya focuses on completing the vision to achieve universal coverage and filling in the gaps in public healthcare. One of India's largest not-for-profit organizations, in the primary public healthcare sector. Piramal Swasthya has been operating a healthcare inventions for more than a decade.

Through 35 innovative public healthcare delivery programs, Piramal Swasthya is operational in 21 Indian states and has served more than 112 million beneficiaries thus far. The Piramal Group's charitable arm is the Piramal Foundation. He creates novel outcomes to remove significant obstacles that prevent India's lucrative opportunities from being realized. The fundamental beliefs of the Gathering "Information", "Activity", "The executives" and "Impact" guide the relationship in satisfying its commitments to society. The establishment accepts that associating with similar individuals can carry positive change to society. Ensure that scalable and long-lasting systems are supported. Currently, foundations collaborate primarily with state governments in 21 nations.

It has established strong connections with governments, technology partners, and international organizations as well as innovative approaches and programs in every direction. The frameworks are authorized through Piramal Swasthya, Piramal Sarvajal and Piramal Underpinning of Training Initiative.

Center areas of concentration

- Wellbeing
- Water
- Training
- Youth commission ethnical TB Drive

Ancestral TB Drive

This cooperation will be a four-time, in line with the public authority's objective, and as paart the celebration of multiple times of freedom.

Ethnic TB Action is of tribal affairs and the health and family welfare in India to address the lack of TB care & support services among ethnic populations. This initiative will be supported by specialized funding from USAID.

The ethnical initiative bringing a wide range of stakeholders with different capabilities to address multifaceted challenges faced by ethnic communities. It involves partnering with donors, government and individuals to improve primary health care delivery from a systemic point of view, technology and infrastructure, and health pool. At same time, it will strengthen various fundamentals such as administration, support, force chain, and design.

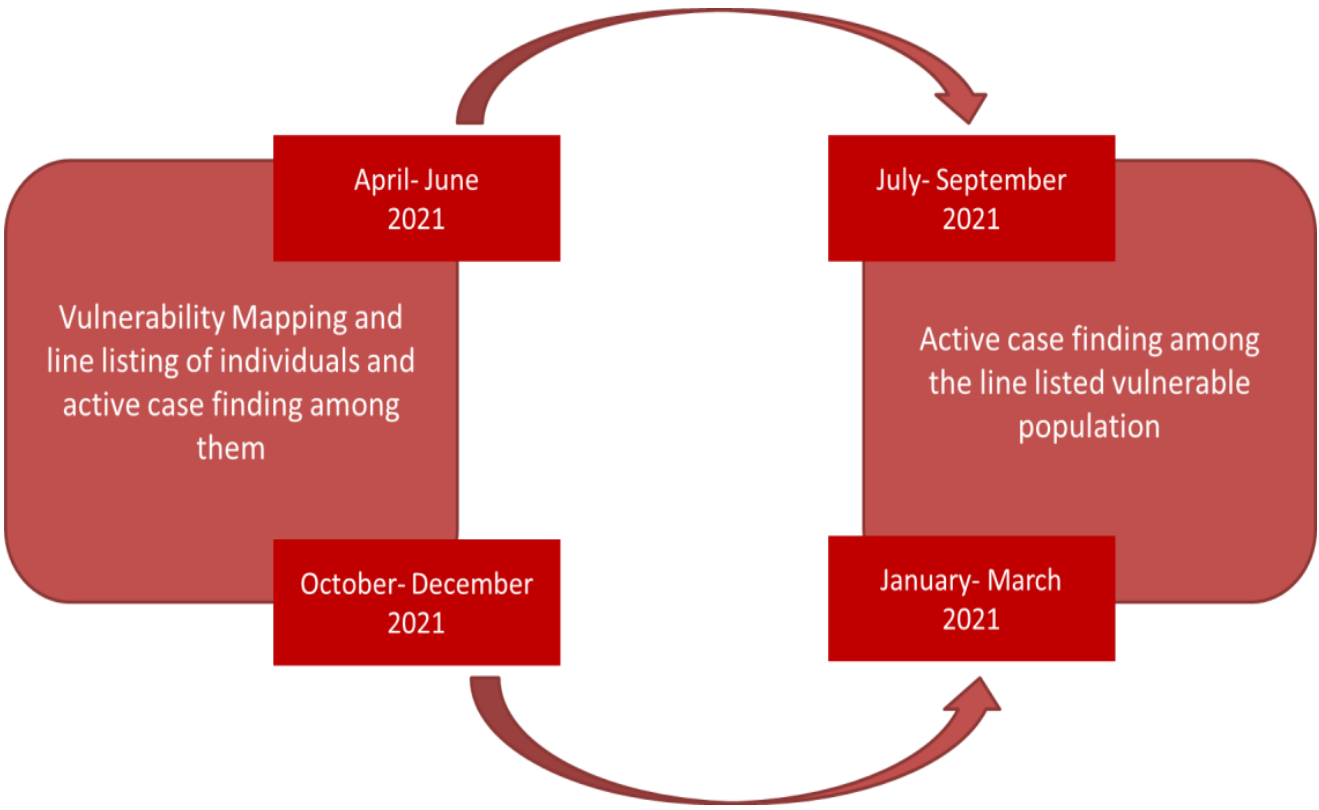
TB ethnic action will sharpen the resolve of all stakeholders and partners. Overall, it will be in line with India's objective of "end TB with a previous focus on TB hot spots of ethnic areas."

Table No. 1

Sr. No	Name of States	Number for District
01	Andhrra Pradesh	01
02	Chhatisgarh	019
03	Gujaraat	10
04	Himachl Prdesh	03
05	Jhakhand	20
06	Madhya Pradash	19
07	Mahrashtra	05
08	Odiisha	14
09	Rajasthaan	06
010	Telangana	01
011	Arunachl Predash	16
012	Assamm	07
013	Manipurr	05
014	Meghalayaa	07
015	Mizoramm	08
016	Nagland	11
017	Sikkkim	04
018	Tripurra	05
Total		161

Improved vulnerability mapping methods would be used in 161 districts in 18 states, volunteer building workshhops would be held, TB active case finding drives would be held on a regular basis, Isonizid Prventive Therpy would be given people, vulnerability reduction would be developed.

Figure 1.



- 1. Government:** The government should provide enough resources and support, both financially and technically, for the Tribal TB initiative. They should improve healthcare facilities in tribal areas, offer quality TB diagnosis and treatment services, and ensure a steady supply of medicines.
- 2. NGOs and civil society organizations:** NGOs can help raise awareness about TB among tribal communities. They can organize programs to reach out to the community, work with healthcare providers, and support patients and their families during treatment.
- 3. Health workers:** Doctors, nurses, and community health workers are essential in preventing and controlling TB. They should be trained in TB diagnosis and management, maintain proper records, and follow up with patients to ensure they stick to the treatment plan.
- 4. Tribal leaders and community representatives:** Tribal leaders and community representatives play a vital role in engaging and involving the community in the TB initiative. They can identify specific factors affecting TB prevention and control, spread important messages, raise awareness, and motivate community members to seek timely diagnosis and treatment.
- 5. Patients and their families:** Patients and their families are crucial for the success of the TB initiative. Patients should seek medical care when they experience TB symptoms, follow the prescribed treatment, and complete the entire course. They should also take precautions to prevent spreading TB to others.
- 6. Media:** The media can help increase awareness about TB in tribal populations. They can create and share messages about prevention and control measures, showcase success stories, and encourage the community to take action against TB.

Figure 2.



Swasthya Portal

Svastilla Portal Swastya is a universal outcome that reflects the health and nutritional status of the Indian ethnic population. It provides information and data and curates innovative practices, exploratory missions, case studies and style practices gathered from different parts of India to fuel an exchange of reason, courage and gesture. The information available in Swastia is likely to provide insight to all stakeholders working with ethnic Indians in the field of health and nutrition. We also hope that this will affect the well-established political lumber.

Figure 3.

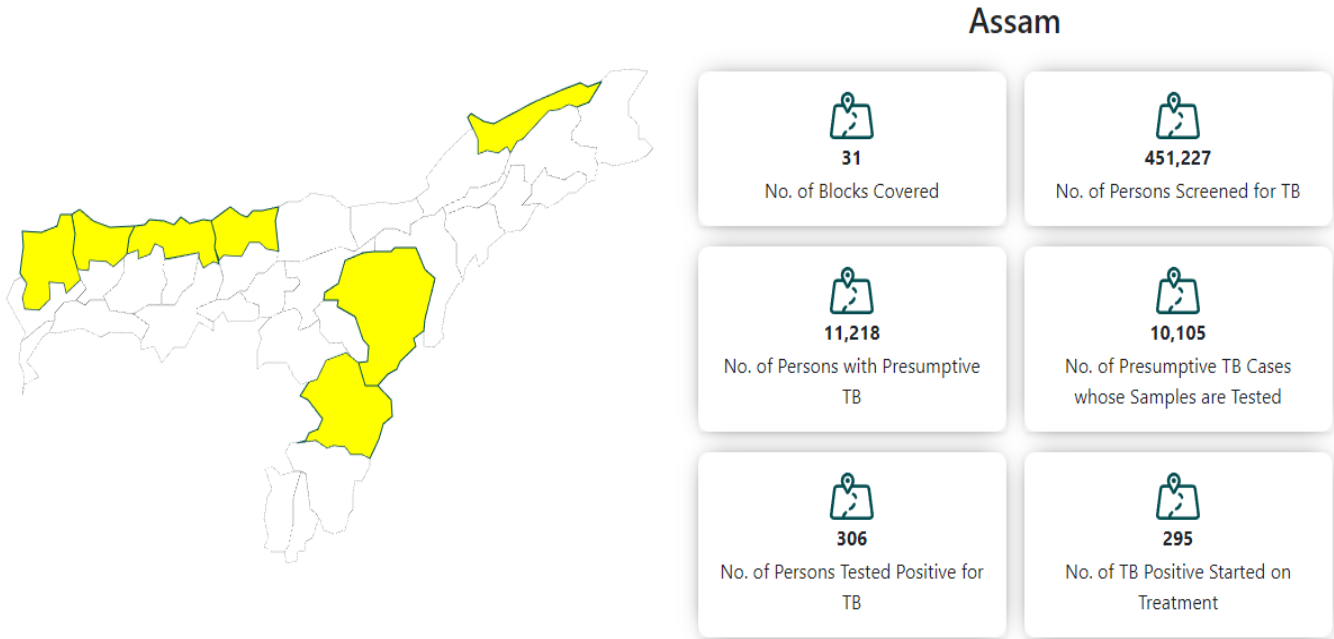
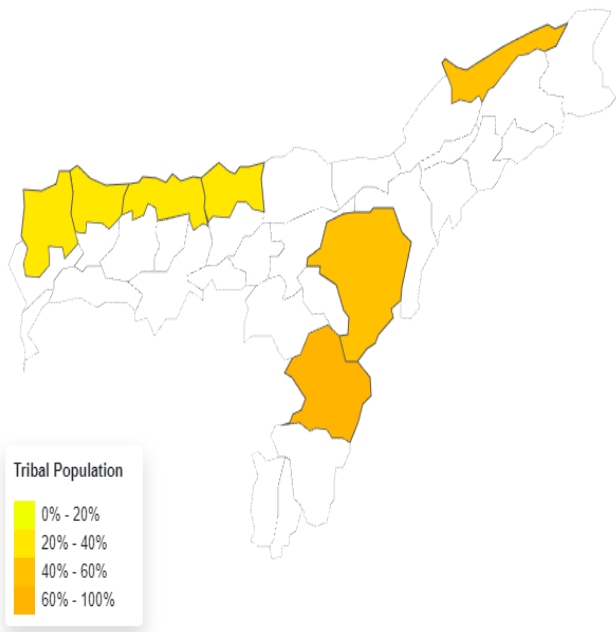


Figure 4.



Assam



Number of Tribal Districts

7



Tribal Population Percentage

12.4

Chapter 2- Objectives

- i) Assess healthcare structure and development pointers in Assam's ethnical regions, fastening on the relationship between the number of blocks and the position of structure.
- ii) Probe the effectiveness of TB webbing enterprise in Assam's ethnical areas, examining reasons for sporadic webbing and its impact on TB discovery and control.
- iii) Identify challenges in furnishing TB- related healthcare services in Assam's ethnical sections, with a focus on sample testing and treatment inauguration, and propose recommendations for enhancement.

Chapter 3 Literature Review

a) Publication Beena E. Thomas

Description- There's no concrete substantiation on the burden of TB among the ethnic populations across India except for many studies substantially conducted in Central India with a pooled estimation of with a high degree of diversity.

Summary of Main Points- To estimate the frequency of TB among the ethnic populations in India.

Gaps in Research- Eligible actors who were screened through an interview for symptoms suggestive of pulmonary TB (PTB); Two foam samples were examined by smear and culture. frequency was estimated after multiple insinuations for on-coverage and a correction factor of 1.31 was also applied to account for non-inclusion of X-ray webbing.

Evaluation of Contribution- The overall frequency of PTB among ethnic groups is advanced than the general populations with a wide variation of frequency of PTB among the ethnic groups at zone and state situations. These findings call for strengthening of the TB control efforts in ethnic areas to reduce TB frequency through ethnic community/ point-specific intervention programs.

b) Publication Mustaque Ahmed and Roopshekhar Mohan

Description- To evoke reasons & factors responsible for interruption of treatment from a cohort of TB defaulters of civic & pastoral areas in Assam.

Summary of Main Points- The cross-sectional study was conducted among 1/3rd of all defaulters who were put on Directly Observed Treatment Short-course chemotherapy in 2011 under 1 civic Tuberculosis Unit (TU) & 2 pastoral TUs of Assam.

Gaps in Research- Majority of the defaulters was illiterate (51.4) in pastoral areas but in civic areas majority studied up to high academy position (37.1). Maximum defaulters were in the age group 25-44 years (55.7 in civic areas & 62.9 in pastoral areas).

Evaluation of Contribution- Early enhancement in symptom was the most common reason leading to treatment interruption. nonstop health education should be handed to TB cases emphasizing the need to continue treatment despite early enhancement in symptoms.

c) Publication Kangjam Rekha Devi, Rinchenla Bhutia,

Description- To understand the epidemiology of TB encyclopedically as well as locally
Summary of Main Points The small sample size in the present study could present a implicit bias regarding representativeness of the strains of MTBC circulating in Assam.

Gaps in Research More elaborate longitudinal studies are needed to be accepted in this region to understand the transmission dynamics of MTBC.

Evaluation of Contribution- tuberculosis isolates revealed 89 distinct spoligopatterns (Fig 1). Seventy-six (76) out of 189 clinical isolates were represented by unique patterns whereas remaining 113 (59.78) isolates were grouped into 13 different clusters.

d) Publication CJ Sonowal

Description- The study aimed to determine people's health and treatment-seeking gesture, the selection of cases, caregivers, and the general population was necessary.

Summary of Main- Points It becomes apparent that the social determinants prevailing in tea auditoriums have a direct bearing on the success of TB control programs in that the high complaint burden situation as prevails in tea auditoriums increases the threat of exposure to TB origins as well as infection and the incarnation.

Gaps in Research-Global literature on TB and social determinants relating to TB has been bandied to find out the gap in information regarding social determinants of TB in the tea auditoriums of Assam

Evaluation of Contribution- Analysis of TB control programs across the world leads to a suggestion that for sustainable control of TB, the restorative interventions need to go hand in hand with preventative interventions that are likely to reduce people's vulnerability to TB infection and complaint.

Chapter-4: Methodology

1. Study design: To find out how common TB is among the tribal population in Assam, we can do a cross-sectional study.

2. Sample selection: We can choose a group of tribal people that represents the whole population in Assam. We need to determine the right number of people for our study, using methods that ensure our results are accurate.

3. Data collection: We can collect information by asking the participants questions from a structured form. Trained staff will conduct the interviews. We will ask about their age, gender, any TB symptoms they may have, if they have used drugs, and if they have been around people with TB.

4. Laboratory testing: We will ask the participants to give us samples of their sputum (the mucus they cough up). We will test these samples in a lab using standard methods to check for TB.

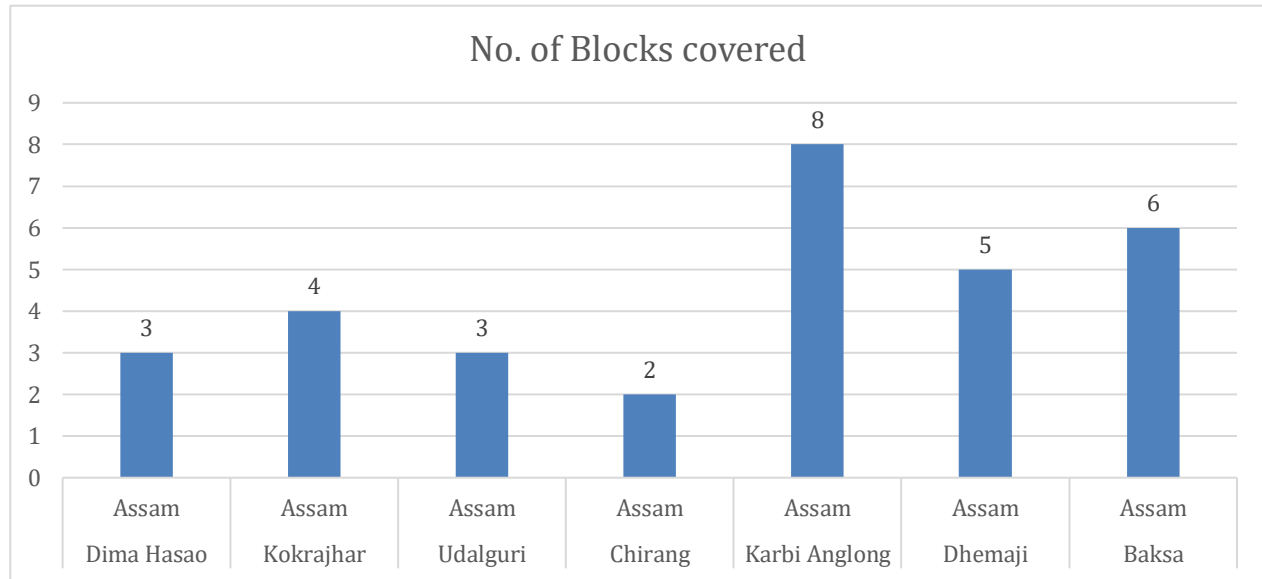
5. Data analysis: We will analyze the data we collected using appropriate statistical methods. We will calculate the percentage of people who test positive for TB among the total participants. We can also look at different groups within the population, like different age groups or occupations, to see if TB prevalence varies.

6. Ethical considerations: We will make sure to get permission from the relevant authorities before starting the study. We will ask for the participants' informed consent, and we will keep their information confidential. We will take necessary steps to ensure the safety and well-being of the participants throughout the study.

Chapter 5: Study Results

1. Blocks Covered

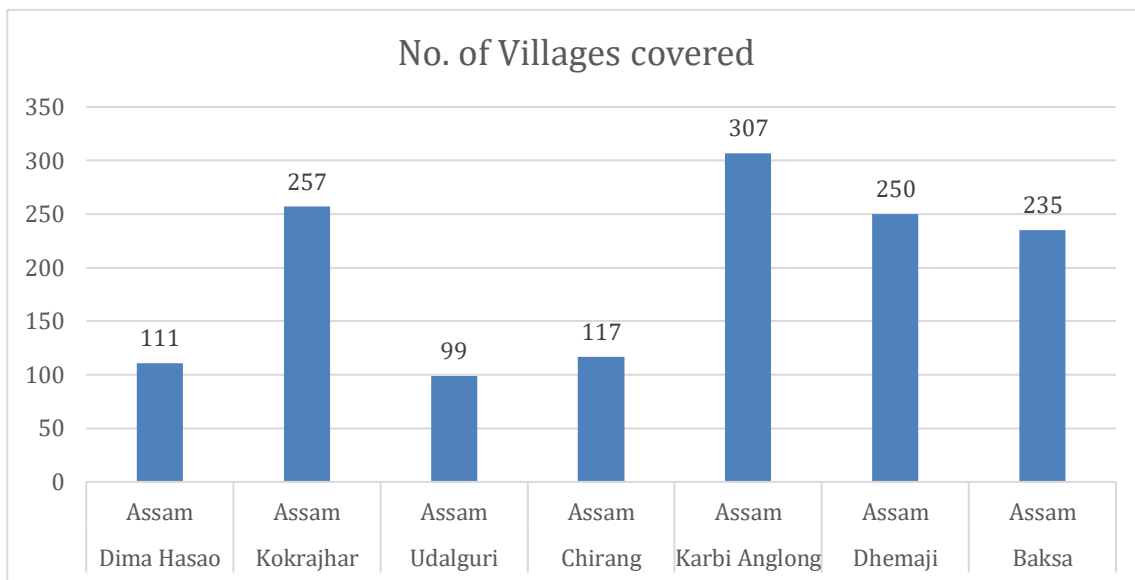
Figure 5.1



The data reveals that the highest number of blocks are concentrated in the district Karbi anglong indicating a significant presence within this range of 8 blocks. Beside other 6 districts of Assam.

2. Villages Covered

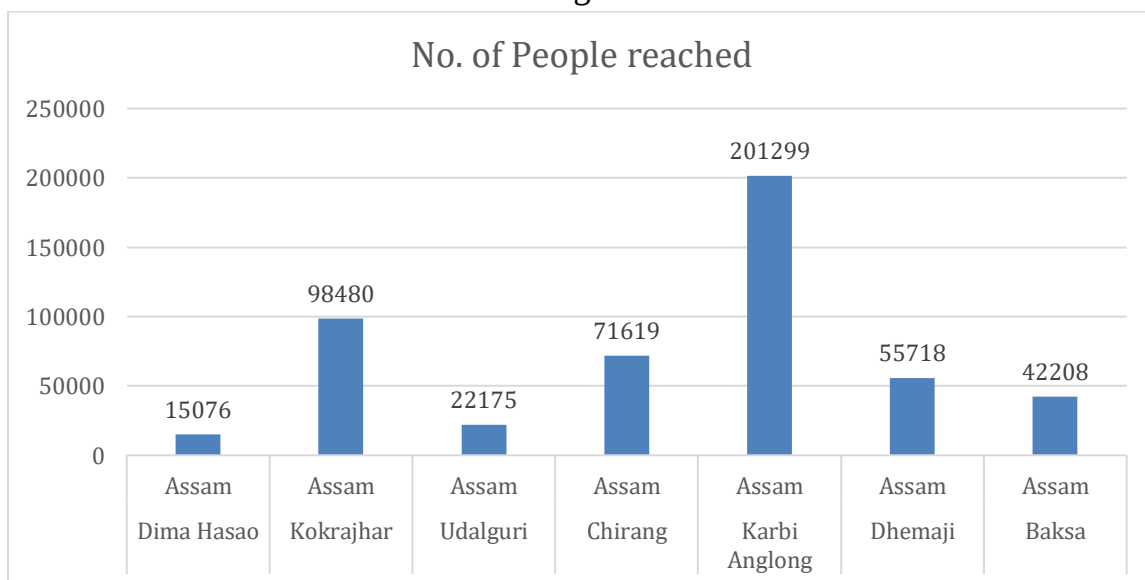
Figure 5.2



The data demonstrates that among the village covered, there is a slightly higher representation of Karbi Anglong district with 300 villages covered and the lowest is in Udalguri as 100 villages.

3. People Reached

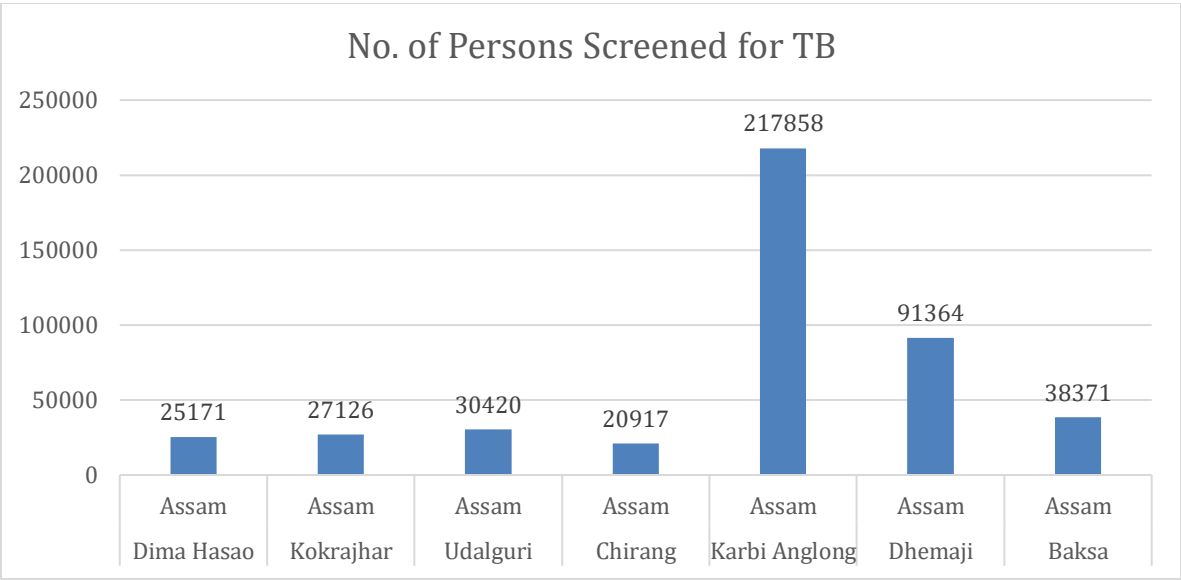
Figure 5.3



Based on the information depicted in the graph, it can be inferred that out of the total no. of people reached, Karbi Anglong has the highest 2 Lakhs people reached and the lowest is in Dima Hasao with near about 10k.

4. Persons Screened For TB

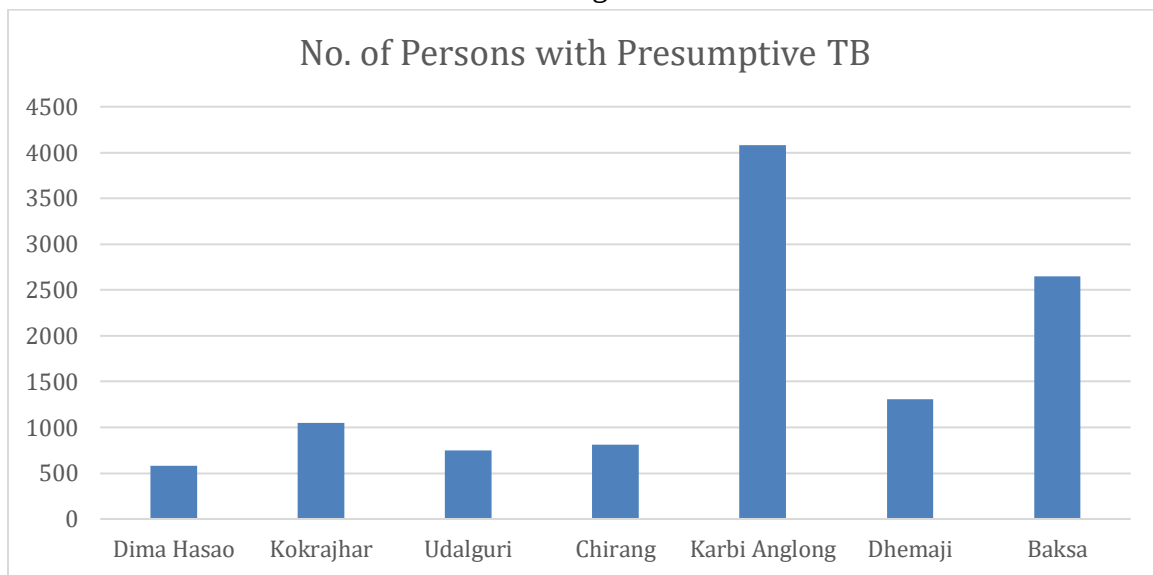
Figure 5.4



The graph reveals that a significant number of respondents for no. of persons screened for TB, specifically 2.10 Lakhs individuals, have reported occasional screened of TB. This indicates that these participants have screened for TB. Conversely, Chirang has 20,000 respondents have stated that they have lesser screened for TB, implying that they have not yet availed themselves of TB testing for any purpose.

5. Persons with Presumptive TB

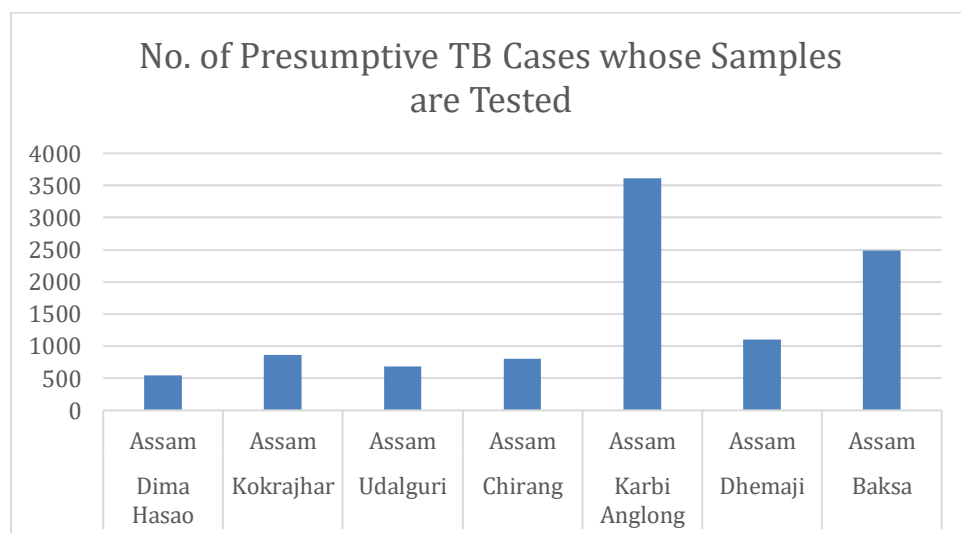
Figure-5.5



graph, number respondents with presumptive TB which is the highest in Karbi Anglong 4k and the lowest with Dima hasao ie, 500.

6. Presumptive TB Cases whose samples are tested

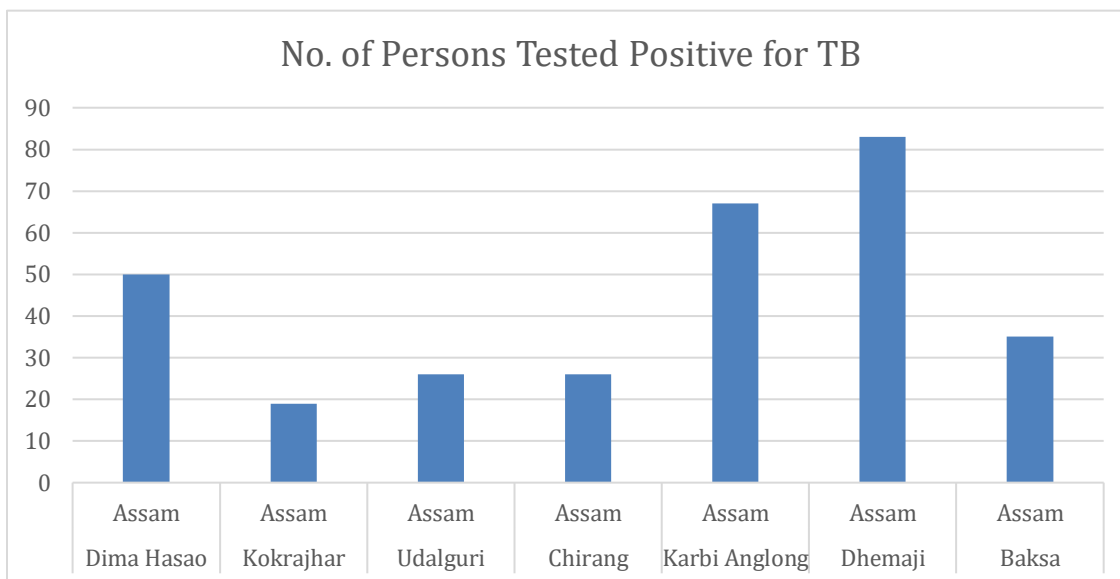
Figure 5.6



The above statements are analyzed here, the challenges as the no. of presumptive TB cases whose samples are tested in tribal areas of Assam

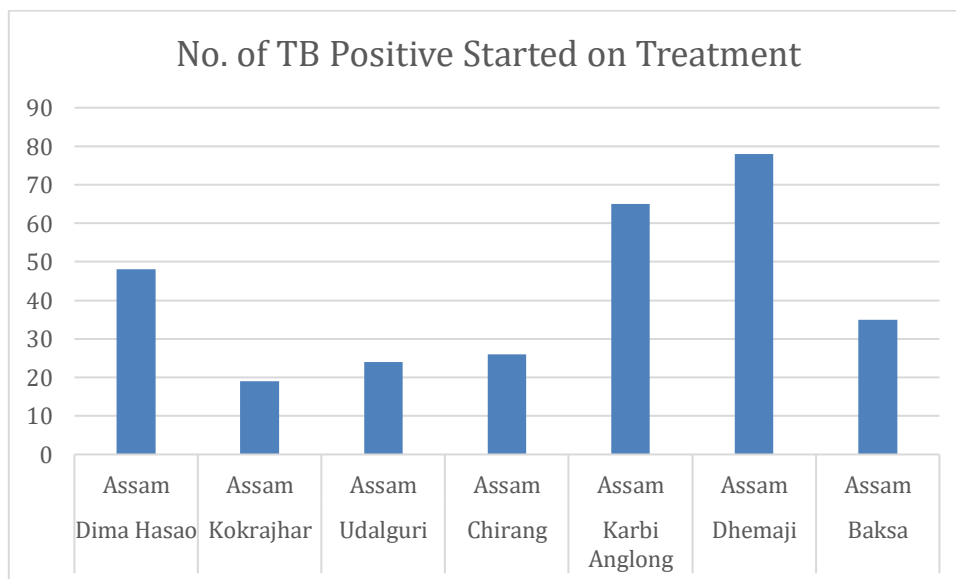
7. Persons Tested positive for TB

Figure 5.7



8. TB positive Started on treatment

Figure 5.8



The statements above highlight the challenges faced by healthcare providers who offer TB treatments in tribal areas.

Chapter 6: Study Findings

1. Blocks Covered

- With an aggregate of 8 blocks, the quarter of Karbi Anglong has the maximum number of blocks. When compared to the other 6 sections of Assam, this indicates that this quarter has a large quantum of structure and development.

2. Townlets Covered.

- With 300 included townlets, the Karbi Anglong quarter has the loftiest representation in terms of the number of townlets covered. Udalguri quarter, on the other side, has the smallest agreements covered, with only 100 townlets included.

3. People Reached

- The data shows that Karbi Anglong, with about 200,000 persons communicated, has the loftiest number of people reached. In discrepancy, the Dima Hasao quarter had the smallest persons reached, with only about 10,000 people being recorded.

4. Persons Screened For TB

- The graph reveals that a sizable proportion of people (2.10 lakh) reported entering TB webbing on a sporadic base, indicating that they've entered TB webbing. Chirang quarter, in discrepancy, has a lower number of repliers (20,000), who have reported lower TB webbing, indicating that they've not yet taken advantage of TB testing.

5. Persons with plausible TB

- According to the data, among the included sections, Karbi Anglong has the loftiest number of repliers (4,000) with plausible TB, while Dima Hasao has the smallest number (500).

6. Plausible TB Cases Whose Samples Are Tested

- Further disquisition is needed to estimate the data about the difficulties encountered when testing samples of suspected TB cases in Assam's ethnical sections.

7. Persons Tested Positive for TB

There was no citation of any precise data or findings indicating.

9. TB Positive Started on Treatment

- Regarding for TB and began treatment, as well as the difficulties endured by medical professionals in administering TB treatment in ethnic communities, no particular data or findings were handed.

According to the study's findings, Assam's Karbi Anglong quarter has the loftiest attention of blocks, an index of the region's substantial development. also, this quarter encompassed the most communities and communicated the most individualities, indicating successful outreach enterprise. The statistics showed that a sizable chance of people had their TB status checked, with the maturity reporting sporadic webbing. also, the loftiest number of people with presumed TB was set up in the Karbi Anglong quarter. To completely comprehend the difficulties encountered with assessing samples from presumed TB cases in ethnic regions, further disquisition is necessary. These results illuminate the healthcare obstacles and achievements in delivering TB- related services in Assam's ethnic areas. The study took great care to choose and educate field investigators who were linguistically complete and knowledgeable about the study's target areas. To gain the needed concurrences and make a connection with crucial numbers in the ethnic townlets, thorough planning visits were made. Given the sensitive nature of the data collecting process involving symptom webbing, foam storehouse, and transportation, these engagements served to clarify the study's objects and prepare the communities for check participation. The study used a thorough fashion that included door- to- door interviews with people aged 15 and aged who showed signs of pulmonary tuberculosis(PTB). Sputum samples were taken, labelled with distinctive individualities, and snappily delivered to designated labs for examination. Strict data operation procedures were used, including electronic forms and free software.

- Internet connectivity
- Portal issue
- . specialized support Social
- Lack of mindfulness
- Cultural beliefs and stations
- Trust issues
- sequestration enterprises
- Some Health care provider also not apprehensive about TB walls linked
- delicate terrain,
 - Geographical position(timber, hilly regions) – Attainability to healthcare installations – Long distances between townlets – veritably poor road condition
- Lack of transportation Social walls
 - casing – poor ventilation
- Overcrowding
- Alcohol use(country liquor), tobacco(Gutka), Smoking
- Inner air pollution; cooking inside
- Living with cattle in the same house
- Poor education installations & reach of weal services. Social Determinants
- PDS force erratic and belated
- Poor aliment among children

- No restroom installations(open defecation)
- No electricity, poor water sources
- Gender demarcation
- inadequate community involvement Health seeking geste
- Detainments in seeking care
- Low mindfulness on TB
- Misconceptions on TB Dependent on ‘ Quack croakers
,
- Traditional mending practices(Faith healers) and artistic beliefs

Health system related

- Poor station of staff
- Poor installations for MDR- TB cases
- Over dependent on ASHAs
- Difficulties faced by ASHA workers, ANM(poor impulses for ASHA), poor commitment due to lack of financial prices
- Lack of healthcare installations – Foam collection – Difficulties in Rx inauguration
- Detainments in informing disquisition results
- indecorous health installations for technicians
- shy contact webbing and chemoprophylaxis

Chapter 7: Suggestion & Recommendations

Suggestion

- a) Focus on infrastructure and development in Karbi Anglong district.
- b) Increase village coverage in districts with fewer villages covered, such as Udalguri.
- c) Expand outreach initiatives to reach more people, particularly in Dima Hasao district.
- d) Promote regular and widespread TB screening across all districts.
- e) Strengthen diagnostic facilities and access to testing for individuals with presumptive TB.
- f) Investigate challenges in testing samples of suspected TB cases in tribal districts.
- g) Establish a comprehensive system to track and support individuals who test positive for TB.
- h) Improve healthcare infrastructure and resources in tribal communities.

Recommend

Discussion and findings, some suggestions:

- a) To determine and evaluate the impact of social determinants on increased risk of TB infection and exposure, a comprehensive scientific study is required.
- b) Incorporating IEC into activities carried out by community-based agencies so that participants perceive them as their very own meaningful program. Propensities should be remembered for well defined for the ancestral populace.
- c) Women's strengthening ought to be at the center of every one of these actions to be taken.

Chapter 8: Conclusion

According to an examination of global TB control programs, restorative interventions and preventative interventions, which lessen people's susceptibility to TB infection and complaint, are necessary for long-term TB control. Upstream and downstream social determinants of vulnerability are targeted by interventions. This primarily on addressing barriers to accessing high-quality restorative services. Consequently, the current paper focuses on TB prevention-related social determinants and threat factors. Since targeted interventions in tea auditoriums in Assam have failed to stop the spread and prevalence of TB, without addressing the measures seems unacceptable. As a result, based on the evidence from the research literature, a number of According to the findings and subsequent discussion, the high complaint auditoriums raises to TB origins, infection, ncarnation, both of which have a direct impact. TB complaints from these individuals. in this manner, tending to the social determinants(mediation) will assist with controlling TB among the tea theater populace. It ought to be simpler to devise a strategy for dealing with the tea theater worker populations because they are confined to tea auditoriums and have a social, financial, and executive setup that is nearly identical to that of traditional theaters. To keep in mind that, studies that have been conducted on the populations of coffee shops, it is highly unlikely that any significant data could be uncovered that would reveal a relationship that has been scientifically established between the prevalence of tuberculosis and social determinants.

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