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Role of Panchayati Raj Institutions in Tuberculosis Eradication: A Study in Dehra Gopipur Block of Kangra, Himachal Pradesh

ORIGINAL ARTICLE



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Abstract

In India, Tuberculosis (TB) is still a major public health concern, especially in rural areas where access to medical care is limited. Gram Panchayats, village self-Governments, play an important role in addressing the challenges regarding tuberculosis. This study investigated the role of Gram Panchayats in reducing the burden of tuberculosis. The study was conducted in the Dehra Gopipur block of district Kangra, Himachal Pradesh. For the present study interviews were conducted with 79 Panchayat Pradhans to ascertain their level of awareness and attitude towards Tuberculosis. The research adopted a quantitative approach. The source of data collection was primary and secondary. The primary data was collected through both telephonic and face to face interviews. The study found that even though each Pradhan was aware about the National Level campaign undertaken by the Government to fight the disease, only one-third were familiar with the precise name of the Abhiyan. Everyone relied on doctors, nurses, and frontline workers for information regarding TB. Almost all Panchayats were involved in tuberculosis initiatives and held TB-related meetings. Most respondents were aware of their Panchayat's TB status and valued a healthy TB-free community. However, many still thought that TB patients need isolation after treatment, indicating the need for a more awareness regarding Tuberculosis.

Key Words

Tuberculosis, Gram Panchayat, Public Health, Panchayat Pradhan.

Introduction

Tuberculosis is known as one of the oldest diseases in the history of humanity and it is one of the leading causes of death worldwide (Thakur et al., 2021). Globally, tuberculosis (TB), which is caused by Mycobacterium tuberculosis (MTB), is a well-known and serious public health concern (Chauhan et al., 2023). A major

worldwide health concern is still tuberculosis, especially in nations like India (Sharma, 2017). Tuberculosis is one of the most infectious diseases in the world and it affects 10.4 million people yearly (Ali et al., 2019). India accounts for 25% of total cases worldwide, making it a serious public health concern in India (Konda et al., 2016b). Tuberculosis majorly affecting the lungs is known as pulmonary TB; if it affects other body parts, it is known as extra pulmonary TB (Quarcoopome&Tornu, 2022; Yadav, 2015). Tuberculosis is a significant public health issue in India. Despite attempts to control it, it requires the strengthening of strategic pillars like its prevention, treatment, and detection, with a the goal of creating a TB-free India (Dhamnetiya et al., 2021). According to India's National Prevalence Survey (2019–2021), 31% of people over the age of 15 had tuberculosis infection (Chauhan et al., 2023). The Government of India aimed to eliminate Tuberculosis by 2025 through the National TB Elimination Program. The Gram Panchayats play a critical role in eliminating tuberculosis (TB) in rural regions by promoting awareness, assuring early detection, and facilitating treatment. The Gram Panchayat plays a role of a bridge between community and Government programs. They collaborate with local health care professionals to educate the population about tuberculosis symptoms and prevention. Panchayats assist in identifying people with tuberculosis symptoms and encouraging them to seek medical treatment. They make sure that treatment is available and follow up with patients to ensure that they complete the entire course. Gram Panchayats help to prevent the spread of tuberculosis and eradicate it by mobilising community support and lowering stigma.

This paper analyzes the awareness and attitude of elected representatives of the Panchayats towards TB and their participation in TB Mukh Panchayat Abhiyan. The following aspects are discussed:

- To understand the level of awareness and attitude of elected representatives (Pradhans) of Panchayats in the Dehra Gopipur block regarding Tuberculosis.
- To find out the extent of participation by Panchayat Pradhans in the Prime Minister's TB Mukh Bharat Abhiyan.
- To understand the involvement and participation of members of the Panchayati Raj institutions in the TB Mukh Panchayat Abhiyan.
- To ascertain the role of Panchayati Raj Institution members in TB Mukh Panchayat Abhiyan.

History of Tuberculosis

The first indication of tuberculosis dates to approximately 400 BC and comes from the discovery of skeletal remains in ancient Egypt which showed the symptoms of the illness. Tuberculosis has always existed in human culture, from the mummies of ancient Egypt to the "white plague" of the Victorian era (Daniel, 2006). The sanatorium cure was the first treatment for tuberculosis, and Robert Koch's discovery of the tubercle bacillus in 1882 marked a significant advancement in the diagnosis and management of the illness (Barberis, 2017). Tuberculosis remains a major worldwide health concern despite these developments, especially for the poorest strata of people (Morazzoni, 2016). Throughout recorded human history and prehistory, it has afflicted humanity. It has exhibited comparable behavior to other infectious diseases, increasing during major outbreaks and decreasing thereafter, despite its temporal span defying accepted notions of epidemic cycles (Daniel, 2006). Tuberculosis has always existed in human culture, from the mummies of ancient Egypt to the "white plague" of the Victorian era (Daniel, 2006). The All India Sanitary Conference in Madras, India, in 1912 adopted a resolution that acknowledged the existence of tuberculosis for the first time (Mahadev& Kumar, 2003). The use of tuberculin testing elucidated the tuberculosis landscape, while the Bhore committee report of 1946 revealed that around 2.5 million individuals necessitated treatment, although only 6,000 hospital beds were accessible (Mahadev & Kumar, 2003). The first outdoor place for isolating and treating TB patients was built in Tilaunia near Ajmer, and then another was established in Almora in the Himalayas in 1908 (John et al., 2013). The foundation of the TB Association of India in 1939 strengthened the country's anti-TB drive (Mahadev& Kumar, 2003). The National Tuberculosis Control Programme was started in 1962 and to address its shortcomings it was changed into Revised National TB Control Programme (RNTCP)

in 1963 (Mahadev& Kumar, 2003). The Indian Government has committed to extending RNTCP to the entire nation by 2005 (Mahadev& Kumar, 2003). Despite advancements, there are still issues to be resolved, such as the rise of drug-resistant tuberculosis and the requirement to improve laboratory services and integrate tuberculosis services into the public and private healthcare systems in India (World Health Organization, 2010). The history of TB in India has been marked by significant progress in TB control, including the development of the RNTCP and the implementation of DOTS-based treatment. However, challenges remain, and sustained efforts are needed to address the burden of TB in India.

Tuberculosis in India

Tuberculosis affects all age groups but in 2016 adults accounted for 90% of the cases (Thakur et al., 2021). Approximately one-third of the global population is infected with tuberculosis; nonetheless, reported cases merely reflect a fraction of the reality, as millions acquire the disease annually, rendering it the second foremost cause of deaths attributable to infectious diseases globally (Yadav, 2015). WHO estimates indicate that over 2.7 million individuals were infected with tuberculosis in India in 2017, resulting in over 400,000 fatalities. India represented 27% of the global estimated 10 million infections and 25% of the 1.6 million deaths. The global burden of illness analysis projected 3 million incident cases in 2016 (Dhamnetiya et al., 2021b). TB is one of the leading causes of death in the 15- to 45-year-old age group and accounts for 3.75 per cent of India's disease burden, which is eleven times that of malaria (Yadav, 2015). Thus, the nation has a high death rate i.e. two people die from tuberculosis (TB) every three minutes (Sandhu, 2011).

In Himachal Pradesh, tuberculosis (TB) is prevalent among lower socio economic groups and in slums, primarily affecting women. The annualized risk of infection in Himachal Pradesh is 1.9%, compared to the national average of 1.0%. This places Himachal Pradesh eighth (3.67%) among the top 10 primary causes of disease in women, while it ranks 7th in the Kangra district (Gupta et al., 2013). TB remains a serious public health issue in India, especially in Kangra and Himachal Pradesh.

Role of Gram Panchayats in Government Programs

Community Engagement (CE) has long been tested globally for a variety of health programs with the goal of controlling disease and improving health. Leaning on the nation's system of local self-Governments, the Government of India launched a nationwide campaign for "TB Mukta Panchayat" on March 24, 2023 which was introduced by Honourable Prime Minister, during the World TB Day celebration in Varanasi, realizing the need for true multi-sectoral action, CE, and ownership to end TB on an accelerated timeline.

Gram Panchayats are the cornerstone of the local self-governance in rural areas, responsible for addressing the needs of community at grassroots level. Gram Panchayats play key role in implementing National and State-level health initiatives, such as the National Tuberculosis Elimination Program (NTEP). They can help in disseminating program guidelines, encouraging community participation, and ensuring the schemes reach the target population especially in rural areas where they are the local governing bodies. Their involvement is vital due to their proximity to the community and understanding of local issues.

In India the Gram Panchayat consists of three three-tier systems: Gram Panchayat, Panchayat samiti and Zila Parishad. The Gram Panchayat is a directly elected representative of the village community (Kumar, 2019).

The TB Mukta Panchayat program is being advocated as one of the primary techniques for making every Community/Panchayat TB-free to attain the overall aim of TB elimination (*PPM: TB Mukta Panchayat Initiatives / Knowledge Base*, n.d.). The Ministry of Health and Family Welfare (MoHFW) is implementing the "Community Support to TB patients - Pradhan Mantri TB Mukta Bharat Abhiyaan" to effectively involve the community in the effort to abolish tuberculosis in India (Ministry of Health & Family Welfare-Government of India, n.d.). The TB Mukta Gram Panchayat seeks to raise public awareness of tuberculosis (TB), encourage TB detection, assist PwTB and their families, and diagnose and treat PwTB early.

The National TB Prevalence Survey found that 64% of TB patients who had symptoms did not seek medical attention; a major contributing factor to this figure was the low level of public knowledge regarding the illness. Thus, we must raise public knowledge of tuberculosis (TB), combat the stigma attached to the disease, and encourage a culture of care-seeking while including the community in our work (Behera, 2023). To establish a community-led movement to end tuberculosis by 2025, the Ministry of Health and Family Welfare (MoHFW) launched the Jan Andolan. The tenets of Jan Andolan also place a strong focus on Jan Samwad, which calls for continuing an informed conversation with everyone. PRIs can be important in creating awareness of tuberculosis (TB), keeping an eye on service delivery, and developing the necessary community reaction (Behera, 2023).

Review of Literature

Quarcoopome & Tornu (2022) stated in their work that the socio-economic position of the patients was found to have an impact on the poor quality of life of those with tuberculosis. Through the management, TB patients must employ strategies to recognise and address the decline in their quality of life.

Burke et al. (2021) state that if studies are conducted with great coverage and intensity, community-based active case-finding for tuberculosis might be successful in altering the epidemiology of the disease and so improve population health. Active case-finding programmes, if possible should include a well-designed, thorough assessment to add to the body of knowledge and shed light on the best delivery and diagnostic approaches.

Thakur et al. (2021) state that the Indian Government is making significant strides to resolve TB-related concerns. However, there is still a considerable amount of progress to be made before the high incidence and prevalence of tuberculosis in India are substantially reduced. The most significant challenges include a lack of knowledge and resources, insufficient infrastructure, an increase in drug resistance, insufficient notification, and general negligence. We can only aspire to a world free of disease if we eliminate hunger, destitution, educate citizens, and eliminate the stigma associated with tuberculosis.

Konda et al. (2016) found that the study subjects were well-informed about tuberculosis. However, there were some misunderstandings about the cause of TB that needed to be cleared up. More youth and less educated groups need to participate in community-based TB awareness programmes.

Chinnakali et al. (2013) argue that the majority of the diagnosis and treatment of TB is well understood in undertaken study, with a few exceptions. This slum's high literacy rate and location close to the public hospital may be responsible for the area's high level of awareness. 16% of people did not know that TB patients might receive free care. Due to their living conditions and vulnerability, slum dwellers need to be made more aware of free medical care. Literacy has been noted in various researches as an important element determining awareness level. The information about TB in the community should be reinforced by healthcare professionals in addition to the education level.

Research Methodology

Descriptive research design was used to attain the objectives of this study. This research design enabled the adoption of mixed method approach, wherein both qualitative and quantitative methods were used for data collection and analysis. The study was conducted in the Dehra Gopipur block of district Kangra, Himachal Pradesh. Dehra Gopipur block consists of 79 Panchayats and 2 Municipal towns. As part of this study, interviews were conducted with all the 79 Panchayat pradhans. The primary data was collected by using a structured interview schedule with both closed and open ended questions to determine the awareness of the Pradhans towards the efforts of the Government towards the elimination of TB, their role in these efforts, and their attitude towards the disease. The contact details of the Pradhans were collected from the concerned Government department. Both face-to-face and telephonic interviews were conducted depending on the convenience of the respondent. In-depth interviews were conducted with 10 Pradhans using an in-depth interview guide. The collected quantitative data was entered in MS Excel and univariate analysis was done.

Table 1

S.No.	Variables	Response
01	Awareness about Government Programme on TB	100.00%
02	Awareness about Name of the Programme on TB	33.33%
03	Source of Information: Doctors, Nurses & FLWs	100.00%
04	Source of Information: Social Media	7.40%
05	Activity in Panchayat related to TB (Meeting/Camp)	98.15%
06	Discussion in Gram Sabha	77.78%
07	Awareness about Status of TB Cases in Panchayat	92.59%
08	Importance to 'Healthy Panchayat' (Maximum Score)	90.74%
09	Importance to 'TB Mukta Panchayat' (Maximum Score)	96.27%
10	Awareness about Theme selected in GPDP	68.52%
11	TB Patient should be kept in isolation after treatment	79.63%
12	Willingness to Involve in any Future Awareness Campaign	100.00%

(Source: Primary source)

Findings

The data provides a thorough overview of awareness and community attitude regarding tuberculosis (TB) of Panchayat Pradhan's in Dehra Gopipur Block, District Kangra, Himachal Pradesh, about tuberculosis (TB). Significantly, the level of awareness regarding the Government's tuberculosis programme was found at 100%, suggesting that information about the program's existence has been effectively disseminated to the people of the area under study. This ensures that grassroots leaders are fully aware of the resources, policies, and support available to combat tuberculosis in their communities. Nevertheless, only 33.33% of participants had the knowledge of its precise designation, indicating a possible opportunity for enhancing communication endeavours. This indicated that only one-third of Panchayat Pradhans were aware of the specific TB program in their villages. The vital role that Panchayat Pradhans play in executing and promoting Government schemes at the grassroots level, this lack of understanding may have an impact on the TB program's effectiveness.

Healthcare professionals were the main providers of information on tuberculosis, with all respondents depending on doctors, nurses, and frontline workers. The healthcare system is crucial to tuberculosis education, as their main sources of knowledge. In communities, these professionals are the most reliable individuals when it comes to health-related issues. They are crucial to public health communication initiatives because they offer guidance, information, and support in addition to medical care.

The social media had a limited impact on spreading the knowledge (7.4%). This highlights a gap in the use of digital platforms for health communication at the grassroots level. This low percentage implies that, despite its increasing popularity as an information source in other sectors, social media has yet to become a substantial way for sharing information about tuberculosis among Panchayats. This emphasizes the need for a more comprehensive approach for digital communication. By utilizing social media alongside with other traditional methods helps in improve TB awareness and control efforts at grassroots level, whereas community-driven events such as meetings and camps focused on TB were widespread and was found important source of knowledge (98.15%). Their participation implies that local leaders are in charge of health interventions, indicating an effective decentralization of TB control. Panchayat involvement is an effective indicator of grassroots mobilization, which is necessary to address public health issues like tuberculosis.

The high percentage of discussions during Gram Sabha sessions (77.78%) indicates that TB is given priority in local community gatherings. Such discussions are critical for promoting awareness, clearing myths and misconceptions, and encouraging community involvement in TB control initiatives. They also give local

authorities the opportunity to educate the public about Government activities and resources for tuberculosis prevention and treatment and the high level of awareness of TB case status in the Panchayat (92.59%) demonstrated that the local community had active involvement and understanding regarding the disease. This could be due to consistent reporting by healthcare professionals in community forums, such as gram sabhas. Being informed of the number and status of tuberculosis cases allows the community to take immediate prevention actions and encourages affected people to seek treatment early. It also helps to reduce stigma since people are more likely to support tuberculosis patients when they realize the seriousness of the disease and the available treatment choices. In addition to this it was also found in the study that there was significant focus on community health, with 90.74% of individuals prioritising a healthy Panchayat and 96.27% recognising the value of a Panchayat free from tuberculosis. This substantial number shows that almost all Panchayat Pradhans were well aware of the prevalence and status of tuberculosis cases in their communities, which is crucial for effective disease control and management. Nevertheless, the signs of persistent stigma or misunderstandings were also observed in the study as 79.63% of individuals believed that TB patients should be segregated after the completion of their treatment. It also highlighted the gap in accurate knowledge regarding TB management and recovery. This belief may perpetuate the stigma surrounding tuberculosis, which might discourage patients from seeking early treatment or reintegrating into their communities after recovery. It underscores the need for targeted educational campaigns to dispel misconceptions about tuberculosis transmission and recovery, ensuring that communities comprehend that treated TB patients do not pose a risk and no longer need to be isolated once they are no longer infectious.

However, the community's complete eagerness and positive attitude was there (100%) as they were found very keen to take part in the future awareness efforts, which showed their dedication to fight against TB. Overall, the data emphasises both achievements and areas of enhancement in tuberculosis (TB) awareness and control initiatives at the local level.

During the field visits to the panchayats of Dehra Gopipur Tehsil in District Kangra, We discovered that the members of the panchayats are interested in eradicating tuberculosis from their respective panchayat. They organize meetings and programs related to tuberculosis in collaboration with the Health Department to raise awareness in their communities. However, we noticed a limitation: despite the efforts of the Health Department, there is still a stigma related to TB among the people. There are still misconceptions related to TB, such as the belief that it is a hereditary disease and that patients need to be isolated throughout the entire treatment. It requires a collaborative approach from the Panchayati Raj Institution, Health Department, and Social Workers to raise awareness and provide education among the communities.

The Department of Social Work of the Central University of Himachal Pradesh also organized a five-day door-to-door field visit to Dhawala Panchayat of Dehra Gopipur block in collaboration with the Health Department and an American-based NGO called "Emtion". This field visit aims to raise awareness in every household of Panchayat and to reduce the stigma among people related to TB so that they will come out for testing. The team, which consists of MSW students, PRI members, and healthcare professionals, visits each home to provide information on the symptoms, prevention, and treatment of tuberculosis. They used pamphlets, posters, and interactive sessions to dispel misconceptions and promote early diagnosis and treatment. This community-based involvement fosters trust, raises awareness, and enhances health-seeking behaviour, all of which support efforts to prevent tuberculosis. The students of the Department of Social Work were divided into Nine groups and each group visited nine different wards with their respective ward members. The Department of Social Work also performed a street play (NukkadNatak) on the road in the central part of the Panchayat to spread awareness among the Panchayat and the people of the market. Through grassroots collaborations, we are strengthening community participation, contributing to the vision of a TB Mukta Bharat.

Discussion and Conclusion

The finding of the study provides a mixed picture of the awareness and perceptions of Panchayat Pradhan regarding TB and public health. The role of Gram Pradhan is crucial in reducing stigma among the community. Panchayat Pradhans were found deeply committed to public health, as indicated by their awareness of tuberculosis cases and prioritizing of a healthy Panchayat. The limited understanding of the tuberculosis program and reliance on social media, together with misconceptions regarding post-treatment isolation, highlighted the need for focused education and better communication techniques for proper redressal of the problem. Improving the knowledge and understanding of Panchayat Pradhans in particular and public in general is pivotal for the successful implementation of TB control strategies and of elimination of stigma associated with tuberculosis disease, resulting in healthier and more informed rural communities. Thus, we can say that by fostering community participation and working closely with health care providers, Gram Panchayats can significantly contribute to the eradication of Tuberculosis in rural areas.

In conclusion, the data shows that there is a strong level of participation in activities related to tuberculosis (TB), as well as strong support for a TB Mukht Bharat. The data also highlights areas that need improvement, particularly in education and communication, to dispel myths about TB treatment and to raise awareness about specific initiatives. By addressing these issues, public health officials and local leaders may collaborate to create healthier communities, limit tuberculosis transmission, and eventually accomplish the goal of TB-free panchayats throughout the region.

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