

## THE ROLES AND REWARDS FOR HEALTH VOLUNTEERS IN TUBERCULOSIS PROGRAM

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### Abstrak

Latar Belakang: Berbagai studi menunjukkan kontribusi signifikan dari relawan kesehatan atau tenaga kesehatan nonprofesional dalam mendukung program kesehatan, termasuk program Tuberkulosis (TB). Artikel ini bertujuan untuk mendeskripsikan alur keterlibatan relawan dalam program TB berbasis komunitas dan memetakan bentuk-bentuk penghargaan bagi para relawan. Metode: Pencarian dilakukan melalui PubMed, Scopus, dan Google Scholar. Ketiga penulis melaksanakan semua tahapan kajian, mulai dari pencarian, penyaringan, hingga seleksi artikel, serta melakukan konsensus untuk menentukan artikel yang relevan dan layak untuk dianalisis lebih lanjut. Artikel dianalisis melalui tahapan menghasilkan temuan, mengkode subtema, dan melakukan analisis tematik. Hasil: Sebanyak 18 studi dipilih, yang semuanya dipublikasikan setelah tahun 2014. Sebagian besar literatur menunjukkan bahwa pelatihan (termasuk biaya transportasi dan makan) berfungsi sebagai bentuk penghargaan sekaligus cara untuk mempertahankan keterlibatan relawan. Beberapa studi juga menyebutkan penghargaan nonmateri, seperti pengakuan dari penyedia layanan kesehatan, akses khusus ke layanan kesehatan, dan barang simbolis seperti seragam atau pin. Hanya sedikit studi yang menyebutkan jumlah spesifik insentif materi. Meski demikian, studi ini mendukung pandangan bahwa pemberian penghargaan materi membantu mempertahankan program di lapangan dan meningkatkan komitmen relawan kesehatan terhadap upaya pencegahan dan pengendalian TB di tingkat komunitas.

**Kata kunci:** Sukarelawan Kesehatan, Program Tuberkulosis, Peran Dalam Program, Penghargaan Program

### Abstract

Background: Abundance studies revealed the significant contribution of health volunteers or lay health workers in supporting health program, including for Tuberculosis program. This article aims to describe the cascade of volunteer involvement in community-based TB programs and to map out forms of rewards for volunteers. Methods: The searching was done from Pubmed, Scopus, Science Direct and Google Scholar. The three authors performed all steps of review started from searching, screening, and selecting the and conducted consensus to determine articles that are relevant and worthy of further analysis. We analyzed the manuscript with steps including generating the findings, coding the subthemes and doing thematic analysis. Result: As many as 13 studies were selected, of which were published after 2014. Most of the literature indicates that training (including transportation and meal costs) serves as both a reward and a means of sustaining volunteer efforts. Some studies also describe non-material rewards, such as recognition from health service providers, special access to health services, and symbolic items like uniforms or pins. Only a few studies mention specific amounts of material incentives. Nevertheless, this study supports the view that providing material rewards helps sustain field programs and enhances the commitment of health volunteers to TB prevention and control efforts at the community level.

**Keywords:** Health Volunteers, Tuberculosis Program, Roles In Program, Rewards Of Program.

### INTRODUCTION

Tuberculosis (TB), despite preventable and treatable, has been global public health threat for more than hundred years. Over 10 million individuals are diagnosed with tuberculosis (TB)(WHO, 2023). It is estimated that the total world population infected with TB in 2023 has reached 10.8 million worldwide, small higher than in 2022(WHO, 2024). Most countries with a high prevalence of TB are impoverished. The majority of people with tuberculosis are in the regions of Southeast Asia (46%), Africa (23%) and the Western Pacific (18%) (WHO, 2022). Litvinjenko, et al (2023) in their study stated that TB is concentrated among groups with lower socioeconomic status, particularly vulnerable individuals and those facing various forms of social marginalization(Litvinjenko et al., 2023). It is related to the fact about the delay in seeking healthcare is often caused by a lack of awareness and knowledge, which in turn is shaped by income and literacy levels (Etim et al., 2024). Addressing this

issue requires a proactive approach, unlike health facilities that wait for patients. One solution is to engage the community health workers or health volunteers to educate and guide people with TB symptoms to seek care at health centers.

Community health workers (CHWs) and their networks are a vital component of the healthcare systems in low- and middle-income countries (LMICs) (Michelle Ludwick, 2021). Operating primarily outside formal healthcare facilities, CHWs typically undergo some level of structured, albeit limited, training provided by the health programs or systems they support. Since the 1978 Alma Ata Declaration, which advocated for universal health through grassroots approaches, CHWs have played a crucial role in delivering primary healthcare services and promoting health education in LMICs. While most CHWs work on a voluntary basis without formal professional certifications, some receive monetary compensation or other incentives. Increasingly, CHW initiatives are recognized as effective mechanisms for advancing public health outcomes in these settings.

The World Health Organization (WHO), in its Global Tuberculosis Report, emphasizes several key principles to eliminate TB globally. One of these principles include the strong coalition with civil society organizations and communities which means engaging civil society groups and community-based organizations fosters inclusivity and strengthens local advocacy and action against TB. This principle become a critical component in TB Program implementation in the community. Community-based organization and civil society are also mentioned several times as the important partnership in the commitments and requests at the second UN high-level meeting on TB in 2023. One of the statements tell about that to strengthening the engagement of civil society and communities affected by TB, it is important to promote active participation of parliaments, civil society, and communities affected by TB—including women, youth, and local groups—in every aspect of the TB response. This approach ensures fair and people-centered access to TB services while emphasizing the need for increased and sustained investments, particularly in community-driven initiatives. The other problem of tuberculosis handling is that the huge of underdiagnosed or untreated cases of tuberculosis, which are estimated 3 million people (M Burke, 2021). Those people at risk of death and severe illness can transmit the infection to other in the close-contact relatives and community.

On the other hands, TB programs have moved away from traditional, centralized approaches and the exclusive reliance on facility-based detection of cases among individuals presenting with TB symptoms (known as 'passive case finding'). They now focus more on decentralized, community-based solutions and outreach activities. It actually is responding the worldwide deficit of skilled health professionals which was projected to rise to 12.9 million, especially among midwives, nurses and physicians, by 2035 (WHO, 2006). Meanwhile, outpatient tuberculosis (TB) treatment control is often delegated to lay health workers (LHWs) in numerous low- and middle-income countries (LMICs) where the shortage is most severe (Puchalski Ritchie et al., 2021). Moreover, the community health volunteers play very significant role to in the implementation of TB program (Abongo, Ulo and Karanja, 2020). However, numerous studies also shared how they have been treated unjusticed regardless how many times and effort they spent for the supporting the program. Unlike community health workers under non-government organization, health volunteer or health cadre or lay health workers are used to pleasure the help the program and the TB Patients (and thier family) without clear incentive or even rights to be protected from the transmission.

Ending TB is also part of Sustainable Development Goals (SDGs) which concern to the sustainability. This review-based study limited the health volunteer or lay health workers or health cadre or community health workers as the people who representing their community, instead of non-government organization. They are basically not professional health workers but receiving training and actively coordinating with the government representative, e.g Primay health facility or district health office. We conducted the scoping review for this study as Arksey and O'Malley (2005) explained about the methodological concept of scoping review; to map the key concept underpinning this research as well as to clarify working definitions, and the conceptual boundaries of a topic. This approach was also chosen because it enables us to gather insights from various publications and studies.

## METODE

Our research follows the scoping review framework established by the Joanna Briggs Institute (JBI) (The Joanna Briggs Institute, 2015). The framework consists of six parts including: (1) conducting the research questions, (2) searching relevant studies, (3) selected the most relevant

studies, (4) charting the data, (5) collating, summarizing and reporting results and (6) consultation/discussion.

This scoping review was conducted in a three-stage theme and applied to identify the activities (TB program) carried out by the health volunteers and the appreciation provided by the government and non-government organizations. This publication was carried out by conducting a systematic review using the Preferred Reporting Items For Systematic Review And Meta-Analysis (PRISMA) method.

**Identifying the research question**

What are the roles and the rights of community health workers or health volunteers or health cadre or lay health wokers involved in (Community-Based) Tuberculosis Programme? In order to answer the research question, we conducted searching strategy using PCCs approach (population, concept, and context). The PCC framework (population, concept, and context) is suggested as a useful tool for formulating clear objectives and defining eligibility criteria for a scoping review (Pollock et al., 2023). Rather than limiting the scope, it allows for a broader selection of papers to be considered for inclusion (Lockwood, dos Santos and Pap, 2019). This narative nswered the research question. The researcher conducts an article search using several electronic databases, namely Pubmed, Scopus, Science Direct, and Google Scholar.

**Data Sources Search**

Pubmed, Scopus, and Google Scholar and grey literature based in Indonesia. The entire search strategy is listed in table 1 as follow:

Table 1. The entire search strategy is listed

Online Database	Search Strategies
Pubmed	(((Health Volunteer*[Title/Abstract] OR Health Cadre*[Title/Abstract] OR Community Health Worker*[Title/Abstract] OR Lay Health Worker*[Title/Abstract]) AND (Tuberculosis[Title/Abstract] OR Pulmonary Tuberculosis[Title/Abstract])) AND (Role* OR Responsibility OR Responsibilities OR Task* OR Duty OR Function* OR Contribution* OR Challenge*)) AND (Right* OR Reward* OR Incentive* OR Honor OR Support*)
Scopus	ALL ( ( "Health Volunteers" OR "Health Cadre" OR "Community Health Workers" ) AND ( tuberculosis OR "Pulmonary Tuberculosis" ) AND ( roles OR responsibilities OR tasks OR duty OR "Job desk" OR functions ) AND ( rights OR rewards OR incentives OR honor ) ) AND PUBYEAR > 2004 AND PUBYEAR < 2023
Google Scholars	("Health Volunteer" OR "Health Volunteers" OR "Community Health Worker" OR "Community Health Workers" OR "Health Cadre" OR "Health Cadres") AND (Tuberculosis OR "Pulmonary Tuberculosis") AND (Role OR Roles OR Responsibility OR Responsibilities OR tasks OR Duty OR "Job desk" OR functions OR Contribution OR Contributions OR Challenge OR challenges) AND (Right OR Rights OR Reward OR Rewards OR Honor OR Incentive OR Incentives or Support OR Supports)

**Selection Criteria**

This scoping review included studies that describe or analyze the active role of key community members in developing and implementing tuberculosis prevention and control programs. We included research such as randomized and non-randomized clinical trials, observational studies, and preprints where communities were directly engaged in prevention, diagnosis, treatment, or eradication efforts for tuberculosis, including the idea generation, design, implementation, monitoring, and evaluation of interventions. We searched for all-time published studies only in English. Excluded materials included editorials, expert opinions, review articles, book reviews, conference abstracts, and studies where the community served only as a data source without active participation.

**RESULT**

**Roles of Health Volunteers/ Lay Health Volunteers in TB Program**

The literature search revealed that health volunteer or lay health workers or health cadres play a critical role in supporting the delivery of tuberculosis services, particularly in resource-limited settings(World Health Organization (WHO), 2015; Dagne Weldemariam, 2019; Glenton, Javadi and Perry, 2021). Volunteers are involved in a wide range of activities, including case identification,

referral, treatment support, and community mobilization. Besides, the health volunteers also do activity like patient outreach, education, monitoring adherence, data collection, and contribute in reporting (Abongo, Ulo and Karanja, 2020; Michelle Ludwick, 2021; Ndu et al., 2022). In the identification and case finding, health volunteers are often the first point of contact for TB patients in their communities. They use various methods, such as household visits, community meetings, and schools, to identify individuals with TB symptoms and refer them to health facilities for diagnosis and treatment. Certainly for the HIV/AIDS key population, the health volunteers has higher potency to reach the group than formal health workers. Consequently, the identification of TB cases in the community has been significantly improved through the involvement of these volunteers.

In the context of education and awareness, the health volunteers disseminate TB knowledge, address myths, and raise awareness within communities. Their local knowledge and connections allow them to effectively communicate health information and promote service utilization. Health volunteers also play a crucial role in addressing health-seeking behavior, as they can provide information about TB symptoms, transmission, and available services (Dagne Weldemariam, 2019; Etim et al., 2024). In Adherence Support, health volunteers monitor patients' treatment adherence, provide counseling, and address any challenges patients may face during their treatment. The treatment of TB usually took for minimum 6 (six) until 9 (nine) months, thus causing the risk of discontinuing treatment. The frequent interaction and supervision by the health volunteers have led to improved treatment adherence and outcomes (Parwati et al., 2021). Besides, the health workers in the primary health care or health facility sometimes need the health volunteers to reach the patients who not coming or taking the medication since, for some countries, the administration of medication is carried out in stages, namely every month after treatment has been running for two months (Biermann et al., 2021). So, the health workers, at health facilities, need the role of health volunteers who are closer to the community to monitor and follow up on patient progress and adherence.

In the area of data collection and reporting, health volunteers are often responsible for gathering information on TB cases, treatment outcomes, and other program indicators. The activity in collecting data could be a community-based surveillance which advantages for They play a critical role in strengthening the health information system and ensuring accurate and timely data are available for decision-making. Motivations for becoming involved as a volunteer included a desire to help their community, a sense of social responsibility, and the influence of community leaders or health workers who encouraged them to participate (Faletehan et al., 2021; Robinson et al., 2021). However, the community-based program often faces sustainability issue. It led the various stakeholders to think about how to reward them. A key challenge reported in the literature is the lack of adequate and consistent incentives or remuneration for volunteers.

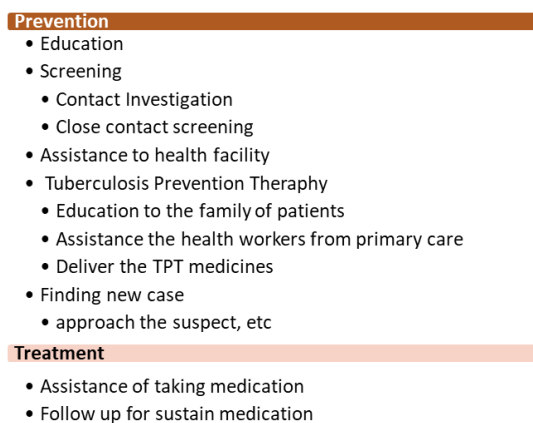


Figure 1. Cascade of Roles of Health Volunteers in TB Program

### Rewards/ Incentives of Health Volunteers in TB Program

Health volunteers of health cadres' incentives or rewards are most commonly divided into financial and non-financial rewards. Most programmes or institution provide financial incentive. In non-government organizations run or implement community-based program, the incentives might be small stipends, performance-based incentives, and reimbursements for travel or transportation (Colvin, Hodgins and Perry, 2021). A few countries also provide additional insurance for the volunteers. Non-financial incentives, globally, are including formal uniforms, T-Shirts, name-tags, access to bicycle or housing resoirces (World Health Organization (WHO), 2015; Ndu et al., 2022).

## DISCUSSION

The findings of this scoping review reaffirm that Community Health Workers (CHWs), health volunteers, or lay health workers play a crucial role in the global fight against tuberculosis, especially in low-resource settings (Fan et al., 2022). These workers are often tasked with monitoring and implementing interventions for their assigned patients. Effective delivery of CHW-led welfare activities relies heavily on managing their limited resources efficiently. A lack of training incentives emerged as a primary barrier, while a strong internal motivation to expand knowledge, enhance skills, and improve patient outcomes served as the main facilitator of CHW participation (Glenton, Javadi and Perry, 2021; Ndu et al., 2022; Fenta et al., 2023; Litvinjenko et al., 2023)

The study also highlighted that task-shifting some TB patient services is already supported from the patient perspective. However, elements like adherence counseling, confidentiality, provider choice, and treatment costs require careful consideration in community-based MDR-TB care programs. Improving community-based TB care could involve strengthening CHW training, supervision, and incentives, as well as broadening their service scope. These findings suggest that CHWs recognize the importance of HIV/AIDS and TB-related interventions but face limitations in meeting the demand. To empower the CHW program to combat the co-epidemics of HIV/AIDS and TB more effectively, significant improvements in supervision and collaboration are essential.

Remuneration for CHW should be considered on and contextualized within a general labour market analysis. Financial incentives for CHW remuneration should reflect job demands, complexity, duration (work-hour), insight based on education or training, and responsibilities (numbers of coverage or outreach). It also should synchronize across all national CHW programs, either managed by government or non-government organization, or civil society organization (CSOs) to prevents favoring higher-paid tasks or disease programs over equitable healthcare delivery.

Based on our comprehensive observation, we have identified that studies discussing incentives, especially financial incentives, are still very few. In our opinion, research is needed that discusses the personal resources used by health volunteers in carrying out their roles in the community and conducts unit cost calculation studies to form the basis for providing incentives for health volunteers. Thus, the government, as the holder of state resources, knows the importance of the state's role in being involved and concretely supporting community participation in ending tuberculosis in the long term. Evidence from research can also be the basis for establishing policies that enable changes in social and economic policies needed to massively distribute tuberculosis prevention programs evenly.

One limitation of this study is that it does not include keywords that fall into the category of health cadre or volunteer roles. This causes the study findings to be limited to two major activities such as case finding and patient supporter. However, to complement the findings in this study by paying attention to the studies cited by the articles we found.

## CONCLUSION

This scoping review has explored the roles of community and civil society as the health cadres or health volunteers in TB prevention and care which c. A unique strength of this study, compared to others, is that it also presents findings related to the different types of rewards provided to health volunteers. Most of the literature indicates that training (including transportation and meal costs) serves as both a reward and a means of sustaining volunteer efforts. Some studies also describe non-material rewards, such as recognition from health service providers, special access to health services, and symbolic items like uniforms or pins. Only a few studies mention specific amounts of material incentives. Nevertheless, this study supports the view that providing material rewards helps sustain field programs and enhances the commitment of health volunteers to TB prevention and control efforts at the community level. In order to ensure the sustainability of health volunteers in tuberculosis programs, it is essential to implement a comprehensive support system that addresses both their material and non-material needs. Providing regular and structured training, along with financial incentives such as transportation reimbursements, stipends, or meal allowances, can help reduce the personal financial burden of volunteering. Additionally, offering non-material rewards—such as community recognition, personal development opportunities, and symbolic items like uniforms or badges—can enhance volunteer motivation and sense of belonging within the healthcare system. Establishing a consistent supervision and mentorship structure, where volunteers receive regular feedback and support from healthcare professionals, is also critical to maintaining engagement and effectiveness. Policy makers should consider integrating health volunteers into official health

frameworks, thereby ensuring consistent funding, acknowledgment, and career development paths. Such strategies can foster long-term commitment and resilience among health volunteers, ultimately strengthening TB control efforts at the community level.

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