



Needs Analysis Of Health Promotion Media On Latent Tuberculosis

Isma Yuniar^{1*}, Yulia Lanti Ratna Dewi², Retno Setyowati³, Sugihardjo⁴, Nurhayati Darojah⁵, Supriyanto⁶

¹Faculty Health of Science, Muhammadiyah Gombong University, Indonesia

^{2,3,4}Faculty of medicine, Sebelas Maret University, Surakarta, Indonesia

⁵Coordinator of Mentari Sehat Indonesia Foundation-Kebumen, Kebumen, Indonesia

⁶Head of Mentari Sehat Indonesia- Central Java, Semarang, Indonesia

e-mail: ismayuniar@unimugo.ac.id*

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* corresponding author

ABSTRACT

Background: Tuberculosis (TB) is one of the world's major health problems. Based on data from the WHO Global TB Report 2024, the country with the second highest tuberculosis rate in the world is Indonesia. Latent Tuberculosis Infection (LTB). LTB is a new challenge in the tuberculosis disease control programme. WHO as a world health organisation also recognises that diagnosing and treating LTB is an important strategy to accelerate the global reduction of tuberculosis to achieve tuberculosis elimination. Evaluation results through interview surveys illustrate that health promotion on latent tuberculosis is still not optimal due to lack of resources. The lack of information and low knowledge of latent tuberculosis infection in the community. This condition requires health promotion with effective media to achieve the target achievements in LTB.

Objective: To analyse the need for health promotion media on latent tuberculosis.

Methods: This research is a research with a mix method approach. with a mixed method approach, namely a quantitative approach combined with a qualitative approach. The quantitative approach used a cross sectional design to obtain information on health promotion that has been implemented, The sampling method used total sampling, there were 25 MSI cadres, data collection using questionnaires.

Results: The results of the study include quantitative results supported by qualitative results. The quantitative results show that most cadres only occasionally use health promotion media as much as 72%, with the types that have been varied, the most are posters as much as 17%, print media types 53%, content about tuberculosis prevention 31%, with individual health promotion methods such as home visits as much as 84%. while the need for health promotion media on latent tuberculosis was studied using a qualitative approach. Data collection techniques used questionnaires and in-depth interview guides. Data analysis used descriptive analysis and content analysis. The results of the theme found that the media for promoting latent TB health was still minimal and information in the media required complete information.

Conclusion: The conclusion of this study is the need for printed latent TB media with complete content so that media can be created that is appropriate to the needs of the community.

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I. Introduction

Tuberculosis (TB) is still a public health problem both in Indonesia and internationally, making it one of the goals of sustainable development goals (SDGs)^[1]. Based on data from the World Health Association (WHO) Global TB Report 2023, the country with the second highest tuberculosis rate in the world is Indonesia, which accounts for sixty-eight per cent of tuberculosis cases in the world^[2] Latent Tuberculosis Infection (ILTB) is a tuberculosis infection that does not give symptoms or is called latent tuberculosis. ILTB is a new challenge in the tuberculosis disease control programme. WHO also recognises that diagnosing and treating ILTB is an important strategy to accelerate the global reduction of tuberculosis to achieve tuberculosis elimination. Tuberculosis Preventive Therapy (TPT) for latent tuberculosis patients is an important intervention to accelerate the reduction of tuberculosis burden and achieve tuberculosis elimination. Low tuberculosis burden countries are those that have achieved high disease detection rates and successful treatment, and a number of barriers have been overcome with the implementation of ILTB treatment programmes^[3]. Data from the Ministry of Health shows that the provision of tuberculosis preventive therapy (TPT) in 2023 is still low. The achievement is only 2.6 per cent or 35,006 people who are household contacts with tuberculosis cases. The coverage is far from the target of 58 percent. This condition is supported by research showing that there are still many people who refuse to be given TPT^[4].

Many factors influence the success of TB programmes, including family support, socioeconomic factors, support from doctors and nurses, access to health services, social stigma, psychological stress, and knowledge^[5]. Interventions to support programmes to reduce the incidence of recurrent tuberculosis in the community need to consider these factors for successful tuberculosis programmes and collaborate with tuberculosis patients, families, and health services to develop appropriate interventions^[5]. In tuberculosis control programmes, especially latent tuberculosis programmes. Lack of education and understanding causes reluctance to do TPT, patients are also reluctant to take medication with a fairly long treatment period. During this time, individuals who are in household contact with tuberculosis cases must take the drugs without interruption. Education to health workers and patients must be done massively to overcome the lack of knowledge of patients and the lack of capacity of health workers in providing TPT. Tuberculosis prevention therapy is very important to achieve tuberculosis elimination by 2030^[6].

Health promotion has been shown to change people's behaviour to improve their health. Research on literacy and health promotion models has proven effective in improving the independence of Tuberculosis patients undergoing treatment and care. The health promotion model is expected to have an impact on the success of the Tuberculosis control programme^[7]. Health promotion in Kebumen Regency on latent tuberculosis is still not optimal, due to a lack of resources. So far, TB health promotion has only been conducted by TB programme holders and village health cadres. The cadres' capacity to obtain information on latent tuberculosis is limited. This is also conveyed in a health article which states that the importance of education to health workers and patients about latent tuberculosis must be massively carried out to overcome the lack of patient knowledge and the lack of capacity of health workers in providing TPT treatment^[6].

Health promotion that has been conducted is limited to health counselling with media such as flipcharts and leaflets and simple flipcharts with very limited time and unsustainable, while those specifically on latent tuberculosis are still very limited. Based on the results of interviews with several tuberculosis programmers, it was found that health education related to tuberculosis was not planned, conducted incidentally together with other activities, and not supported by appropriate methods and media, so it was felt that health promotion on latent tuberculosis was not optimal.

Based on field surveys and data on tuberculosis in Kebumen Regency, especially latent tuberculosis, based on the latent tuberculosis achievement indicators, it is still below the district and national targets. However, Kebumen district, together with Mentari Sehat Indonesia (MSI), continues to improve its performance, which has been supported by district head regulation no 49 of 2023. Therefore, one of the efforts to improve the tuberculosis programme is to know the health promotion needs analysis for latent tuberculosis.

2. Method

This research is a mixed method approach, namely a quantitative approach combined with qualitative^[8]. The quantitative approach uses a cross sectional design to determine the health promotion on tuberculosis that has been implemented. The need for latent tuberculosis health promotion media will be developed with qualitative research. The study was conducted in the Kebumen area in September-November 2024. The sample in quantitative research was 25 Mentari Sehat Indonesia (MSI) tuberculosis cadres using purposive sampling method, namely active MSI cadres. The qualitative research used key informants, namely latent tuberculosis clients and supporting informants, namely family, MSI tuberculosis cadres and the holder of the tuberculosis programme at the health centre. The instruments used in this study were questionnaires and interview guidelines using in-depth interview techniques, with data validity testing using source triangulation^[9]. In this study, quantitative analysis used descriptive analysis, while qualitative analysis was open-ended using an inductive process using thematic analysis.

3. Results And Discussion

3.1. Results

3.1.1. Quantitative Results

The research results include quantitative results which are supported by qualitative results^[10]. The quantitative results show that the majority of cadres only occasionally use health promotion media, as many as 72%, with the types varying, with the most common being posters, as many as 17%

Tabel 1. Tuberculosis health promotion that has been implemented

No	Statement	%
1	Use of media in tuberculosis health promotion	
	Yes	20%
	Sometimes	72%
	No	8%
2	Tuberculosis health promotion media used	
	Flyer (selebaran)	14%
	Poster	17%
	Flyer	15%
	Booklet	6%
	Magazine	6%
	Billboard	12%
	Flip chart	18%
	Video	9%
	Film	4%

Tabel 2. Health promotion media needs on latent tuberculosis

No	Statement	%
1	Availability of health promotion media on latent tuberculosis	
	Existing	17%
	Not available	83%
2	The need for health promotion media on latent tuberculosis	
	Need	100%
	Not needed	0%

Table 2. shows that most cadres (83%) have not used media in conducting health promotion on latent tuberculosis, and 100% need health promotion media for latent tuberculosis.

Table 3. Frequency distribution of needs analysis of health promotion media on latent tuberculosis

No	Statement	%
1	Media type requirements	
	Print media	53%
	Electronic media	22%
	Social media	24%
2	Material Needs	
	Tuberculosis disease (latent)	26%
	Treatment	29%
	Prevention	31%
3	Method Needs	
	Individual Methods (home visits, discussions, interviews, etc.)	84%
	Group Methods (joint counselling, seminars, etc.)	16%
	Mass/Public Methods (billboards, television, radio, etc.)	0%

The table above shows that most respondents stated that the type of media needed was printed media (53%), with latent tuberculosis prevention materials (31%) with most choosing individual methods (84%) such as discussions and home visits.

3.1.2. Qualitative Results

The results of qualitative research, analyzed using theme analysis, the following themes were obtained:

➤ Health promotion media for Latent TB is still minimal

This result is supported by the results of the interview which showed that the media promotion on latent tuberculosis is still minimal:

'So far, the cadre mother has come, given an explanation of the medicine for prevention, while explaining the medicine, and if I am confused, I ask the mother (cadre)..... not using paper or anything.... It would be nice if there was a paper with the explanation so I can read it (Mrs I, Client's family).

'So far, I have not used media for education, because the media is limited....There is a leaflet from the centre but it may be limited if there is none at the puskesmas here. So we just explain it to the family and the client (Mrs M, TB Programmer at the puskesmas).

'Health promotion for active TB is also still a homework, especially the TPT..... target has not been achieved, if the media is mostly still related to TB' (Mrs U, TB Coordinator, Health Office).

➤ Information about Latent TB is not specific

Based on the results of in-depth interviews, most informants stated that they needed specific information on latent tuberculosis. Currently, most health promotion is for active tuberculosis, so there is still a need for comprehensive information about latent tuberculosis, which includes treatment, prevention, nutrition and general information about latent tuberculosis.

'information related to medicine, it's very important....when I was in X hospital the doctor said to go to the pharmacy but the puskesmas nurse didn't explain it like that, so I was confused' (Mrs I, Client's family).

'The community must be informed...if not, they won't want to check for TPT, so first they are told what the consequences are..., what the benefits are, if they understand everything, they will obey so they don't get TB' (Mrs S, Cadre)

'I need to know everything about latent TB, mum. Everything...so that it's clear' (Mrs M, TPT client).

Based on the interview results, most informants stated that they need latent tuberculosis health promotion methods using individual methods. Individual methods can be organised with discussions or direct interviews, home visits with media in the form of print media.

'.... that has been done by Mrs S (cadre), chatting like this..... directly at home, if I have something to ask, directly to the mother ... it's more comfortable like that' (Mrs M, TPT client)

'Visiting like this is clearer....if there is something that can be read while reading, I prefer it, if it's a video, often if it's in a group I also blink, I don't watch it...' (Mrs I, client's family)

'For me, going directly to the patient's house is very effective mba, once when I visited I saw that there were neighbours or relatives who wanted to listen, I invited them to join so I met not only the patient, but also the patient's family and surroundings' (Mrs. S, Cadre)

'...the media is still very limited, mba....it's also from the centre, we don't make our own....Actually, if there was some kind of booklet with questions and answers about latent TB and interesting pictures, people would be more interested' (Mrs U, DHO TB Coordinator).

3.2. Discussion

Optimal health promotion is proven to be able to shape the expected health behaviour, this is in accordance with research that states that health promotion is proven to be effective in increasing independence in the care and treatment of tuberculosis patients, through counseling and education activities^[7]. Health education has been proven effective in increasing knowledge and changing behaviour related to Tuberculosis (TB) prevention. This information can be used to support health policy making, programme planning, and the development of more effective intervention strategies to reduce the burden of TB disease in the community^[10]. Meanwhile, the knowledge factor indirectly affects self-management through attitude. Thus, knowledge and attitude require the intervention of other parties who can mediate. This is to avoid the occurrence of Multidrug Resistant Tuberculosis (MDR-TB)^[11]. Another study stated that health promotion through booklets had an impact on reducing anxiety related to MRI examinations^[12]. Print media and electronic media in health promotion have been proven to increase knowledge and change health behavior^[13].

Media or visual aids in health promotion can be interpreted as health promotion aids that can be seen, heard, touched, tasted or smelled, to facilitate communication and disseminate information^[14]. Other studies have shown that various health promotion methods can prevent the transmission of tuberculosis. The study was conducted through activities such as education, socialization, leaflet distribution and role play on the implementation of PHBS and regularity of treatment for TB patients. Through these activities, the community understands about TB, prevention and treatment so that they are able to apply it in the family environment and the wider community. The community is also able to understand the symptoms that arise so that they can treat it as early as possible^[15].

This is supported by the results of the study which stated that there is an influence of providing audiovisual media-based education before and after treatment on medication compliance in tuberculosis patients at Depok Regional Hospital. Providing health education with audiovisual media is very effective in increasing knowledge, especially in tuberculosis patients who are undergoing OAT treatment. This study can be a reference, especially for health promotion and become the basis of evidence for nursing interventions that can be carried out on patients^[16]. Nursing strategies in the form of intensive health education, self-care modules, and administration of anti-tuberculosis drugs have proven to be more effective in increasing awareness, attitudes, and practices of tuberculosis in the experimental group compared to the control group^[17]. Good promotional media supported by using media that has undergone needs analysis in its development will be effective in achieving its goals^[18]. This is in accordance with research which states that the development of health promotion media that has undergone development research is quite effective for use as health promotion media^[19], this also applies to the development of good learning media, made from research and development from the results of needs analysis^[20].

4. Conclusion

Based on the results of the above research, it can be concluded that the health promotion of latent tuberculosis is needed through individual methods and print media tailored to the needs of the Kebumen community. This research can be developed with health promotion media development research to be further developed in the

aspects of developing the content and design of health promotion media, especially on latent tuberculosis in Kebumen Regency, which is tailored to the needs and background of the local community so that it will be instrumental in supporting health promotion programs to succeed the TB prevention program, especially on latent tuberculosis.

References

- [1] Kemenkes, "PROFIL KESEHATAN INDONESIA TAHUN 2023," 2024, Accessed: Jun. 18, 2025. [Online]. Available: <http://www.kemkes.go.id>
- [2] World Health Organization, *Global Tuberculosis Report 2023*. World Health Organization, 2023.
- [3] K. Kesehatan and R. Indonesia, "Strategi Nasional Penanggulangan Tuberkulosis di Indonesia," 2020.
- [4] I. Nur Safitri, M. Martini, M. Sakundarno Adi, and M. Arie Wurjanto, "Faktor yang Berhubungan dengan Penerimaan Terapi Pencegahan TB di Kabupaten Tegal," *Jurnal Riset Kesehatan Masyarakat*, vol. 2023, p. 4, 2023, doi: 10.14710/jrkm.2023.20.
- [5] D. Dameria *et al.*, "Improvement of Patients' Knowledge, Attitude, and Practice on Tuberculosis Treatment Using Video and Leaflet," *Jurnal Promosi Kesehatan Indonesia*, vol. 18, no. 2, pp. 79–88, Jul. 2023, doi: 10.14710/jpki.18.2.79-88.
- [6] D. Arlinta, "Cakupan Terapi Pencegahan Tuberkulosis Jauh di Bawah Target - Kompas.id." Accessed: Nov. 10, 2024. [Online]. Available: <https://www.kompas.id/baca/humaniora/2024/03/22/cakupan-pemberian-terapi-pencegahan-tuberkulosis-jauh-dibawah-target>
- [7] S. , dkk Khoriroh, "HEALTH PROMOTION AND LITERACY MODELS TO INCREASE THE AUTONOMY OF TUBERCULOSIS PATIENTS," *Jurnal Endurance*, vol. 7, no. 3, pp. 493–499, Nov. 2022, doi: 10.22216/jen.v7i3.1395.
- [8] F. Hakim Nasution, M. Syahrani Jailani, and R. Junaidi, "KOMBINASI (MIXED-METHODS) DALAM PRAKTIS PENELITIAN ILMIAH," *Journal Genta Mulia*, vol. 15, no. 2, pp. 251–256, 2024, [Online]. Available: <https://ejournal.stkipbbm.ac.id/index.php/gm>
- [9] "Qualitative_Data_Analysis".
- [10] M. Marwah, E. Rekawati, A. Y. Nursasi, and I. P. Sari, "EDUKASI KESEHATAN MEMENGARUHI PERILAKU PENCEGAHAN PENULARAN TUBERKULOSIS: A SYSTEMATIC REVIEW," *JURNAL RISET KESEHATAN POLTEKKES DEPKES BANDUNG*, vol. 16, no. 2, pp. 365–374, Jun. 2024, doi: 10.34011/juriskesbdg.v16i2.2534.
- [11] R. Minggarwati, N. Juniarti, and H. Haroen, "Intervensi pada Pasien Tuberkulosis untuk Meningkatkan Kepatuhan dan Manajemen Diri," *Jurnal Keperawatan Silampari*, vol. 6, no. 2, pp. 1630–1643, May 2023, doi: 10.31539/jks.v6i2.5004.
- [12] A. Bolejko and P. Hagell, "Effects of an information booklet on patient anxiety and satisfaction with information in magnetic resonance imaging: A randomized, single-blind, placebo-controlled trial," *Radiography*, vol. 27, no. 1, pp. 162–167, Feb. 2021, doi: 10.1016/j.radi.2020.07.011.
- [13] M. Jurusan *et al.*, "EFEKTIVITAS PENGGUNAAN MEDIA CETAK DAN MEDIA ELEKTRONIKA DALAM PROMOSI KESEHATAN TERHADAP PENINGKATAN PENGETAHUAN DAN PERUBAHAN SIKAP SISWA SD."
- [14] A. A. Fahriani, "RANCANGAN BUKU TUNTAS TB SEBAGAI MEDIA PROMOSI KESEHATAN PENGobatan PENDERITA TB PARU." [Online]. Available: <https://www.researchgate.net/publication/326677510>
- [15] A. dkk Ismail, "PROMOSI KESEHATAN DAN PERILAKU PENCEGAHAN PENYEBARAN TUBERKULOSIS DI DESA TUNGGUL SRAGEN," *Jurnal Pengabdian Masyarakat*, Jun. 2023.
- [16] A. H. Agustina, A. Purnama, and Y. Koto, "Pengaruh Edukasi Berbasis Media Audiovisual terhadap Kepatuhan Minum Obat pada Pasien Tuberkulosis," 1261.
- [17] T. Nanthini and K. Karunagari, "Effectiveness of Intensive Health Education on Tuberculosis Awareness, Attitude and Practice on Pulmonary Tuberculosis among Patients with Pulmonary Tuberculosis," 2021.

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- [18] A. Nadyanti and Y. M. Hidayati, "Analisis Kebutuhan Pengembangan Media Audiovisual Berbantuan Powerpoint dalam Meningkatkan Pemahaman Kesehatan Reproduksi," *Jurnal Basicedu*, vol. 6, no. 4, pp. 6713–6724, May 2022, doi: 10.31004/basicedu.v6i4.3349.
- [19] T. T. Ruhmawati, A. Rachman Hakim, A. Fitri Hilman, and R. Sudiyat, "PENGEMBANGAN MEDIA PROMOSI KESEHATAN BUKU SAKU 'GERMAS' BAGI KADER KESEHATAN," *JURNAL RISET KESEHATAN POLTEKKES DEPKES BANDUNG*, vol. 14, no. 1, pp. 43–49, May 2022, doi: 10.34011/juriskesbdg.v14i1.2015.
- [20] Aini Zahra, Putri Rahayu Sya'baniah, Khoiriyah Isni, and Ayu Saidah, "Pengembangan Media Permainan TESABEN (Tebak Salah Benar) Sebagai Media Promosi Kesehatan Peningkatan Kesadaran Aktivitas Fisik," *SEHATMAS: Jurnal Ilmiah Kesehatan Masyarakat*, vol. 2, no. 4, pp. 816–826, Oct. 2023, doi: 10.55123/sehatmas.v2i4.2261.