



The Role of Social Media to Eradicate Leprosy Stigma: Tertiary Prevention for Enhanced Lives

Aisha Diansasnita, Alifia Rizqyandra Azzahra, Amru Ubaidillah Thohar, Dewi Arini, Fahrur Nisa' Sifa'ul Husna, Fidela Rahma, Hanif Ahmad Musyaffa', Karina Putri Permatasari, Maria Kireina Harianto, Mazroatul Khoiroh Ummah, Nabila Testania, Nur Fauziah Azzahro, Usraturrahmah

Department of Public Health Science, State University of Malang, Malang, Indonesia

E-mail: amru.ubaidillah.2206126@students.um.ac.id

ABSTRACT

Leprosy is an infectious disease that can affect the skin, peripheral nerves and other organs in the human body. Leprosy is caused by the bacteria *Mycobacterium leprae*, which is also known as *leprae*. Even though leprosy has a long history, this disease is still a global health problem, especially in developing countries like Indonesia. The aim of this research is as a health promotion tool to provide information and education about leprosy by providing tertiary prevention efforts through social media with the Instagram account @komkes.ikmb22. The research method used was content analysis of health promotion media. This research shows that media in the form of posters regarding tertiary prevention of leprosy succeeded in attracting the attention of the public or viewers with positive interactions, namely by giving 61 likes and 2 comments. It can be concluded that health promotion through social media, especially Instagram, can be an effective strategy to increase public understanding about leprosy and reduce social stigma. Increasing knowledge regarding tertiary prevention of leprosy can change people's quality of life for the better.

KEYWORDS

leprosy, prevention, tertiary, promotion, health

Received: 10 December 2023

Revised: 4 July 2024

Accepted: 23 December 2024

How to cite: Diansasnita, A et al. (2024). The Role of Social Media as an Educational Tool: Removing the Negative Stigma of Leprosy to Improve the Quality of Life of Leprosy Patients through Tertiary Prevention. *Inov Local Empowerment Mass in Developer Sustainable*, 2(2): 58-66.



INTRODUCTION



This is an open access article under [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)



Leprosy is an infectious disease, commonly known as leprosy, caused by the bacterium *Mycobacterium leprae*. It can affect the skin, peripheral nerves and other organs in the human body. Leprosy has a long history and is often associated with social stigma. According to the World Health Organization (WHO), leprosy is still a public health problem in some regions, especially in developing countries. The bacteria that cause leprosy are spread through respiratory droplets and direct contact with untreated patients.

Leprosy remains a major and important global health problem. This can be seen in the number of leprosy cases in Indonesia in 2013 there were 16,856 new leprosy cases. In 2014 there were 17,025 new cases of leprosy (Dinkes Jawa Timur, 2014). In 2015, 17,202 new cases of leprosy were reported (Dinkes Jawa Timur, 2015). While in 2016 there were 16,826 new cases (Dinkes Jawa Timur, 2016). Based on data from the World Health Organization (WHO) in 2018, it was reported that the number of new cases of leprosy in the world was 210,671 cases, with a new case finding rate of 2.77 per 100,000 population. Indonesia is ranked third in the world as the country with the most new cases of leprosy after India and Brazil. The number of new leprosy cases reported in Indonesia in 2017 amounted to 10,477 cases. East Java is the province with the highest number of leprosy cases in Indonesia (Noratikasari et al., 2020). East Java Province has the highest number of leprosy patients in Indonesia in the 2015-2017 period, totaling 3,373 people. The number of cases consisted of 2,033 men and 1,340 women. Based on the burden rate, in 2016 East Java was the only province in western Indonesia with a high leprosy burden rate (NCDR 10.23% per 100,000 population). The leprosy prevalence rate in East Java Province was 1.04 per 100,000 population in 2016 and increased to 1.06 per 100,000 population in 2017.

The method of transmission of leprosy is still not known with certainty, but it is estimated that it is through direct contact of leprosy sufferers with other people through inhalation and skin contact (Singal A, 2016). Another opinion says that leprosy can be transmitted transplacentally, blood transfusions, organ transplants, and the digestive tract. Leprosy lives in macrophages and Schwann cells, growing in cold tissues such as skin, nasal mucosa, and peripheral nerves. The cleavage period for leprosy takes a very long time compared to germs. other, namely 12-21 days and an optimal growth temperature of 30-33°C with an average incubation period of 2-5 years (Bratschi MW, 2015). Leprosy can live more than 7 days outside the host, in dry nasal secretions, and in dark conditions, whereas in wet soil it can live more than 46 days at temperatures varying between 20.6°C-35.7°C with humidity 43.7%-77.6% (Rees RJ, 2014).

Prevention in general is to take action before the event. In taking measures for prevention, it should be based on data/information sourced from epidemiological analysis results or epidemiological observations/research results. Tertiary Level Prevention The target of prevention is in leprosy with the aim of preventing from developing disability. At this rate, rehabilitation is also undertaken. Rehabilitation is an effort to restore the physical, psychological, and social functions of lepers as optimally as possible. In 1964 resistance to DDS (single drug) was discovered. In 1982 the WHO recommended the treatment of leprosy with Multi Drug Therapy (MDT) for both PB and MB types. Multi Drug Therapy (MDT) is a combination of two or more antifungal drugs. One of them is rifampicin as a bacteriidal anti-





leprosy, while another is bacteriostatic. Leprosy treatment requires prompt and ongoing treatment and requires discipline in treatment. Leprosy treatment takes a long time. PB type leprosy takes 6–9 months, while MB type takes 12–18 months. Treatment of leprosy aims to break the chain of transmission, cure diseases of sufferers, prevent disabilities or prevent the increase in disabilities already in treatment (Kemenkes, 2014).

In addition to such prevention and treatment, to prevent the transmission of leprosy before it is spread quickly, the public needs to know information about leprosy. Leprosy education in the community is important because leprosy is an infectious disease that causes various health problems, both medical and social, economic and cultural (Abdillah et al., 2016; Samidah et al., 2022). The stigma of leprosy is still a problem that needs to be considered, so the public needs to be provided with information and health education about the disease (Rifa'i et al., 2020). We choose to educate the community regarding leprosy through health promotion media in the form of posters or videos uploaded on social media. Social media was chosen as a promotional tool for health because it has the ability to reach a wider public and reach a wider audience (Pandhika et al., 2023). In addition, social media also allows accurate and relevant distribution of Health information to the wider community (Anisa et al., 2022).

MATERIALS AND METHODS

Health Promotion is an effort made towards the community so that they are willing and able to maintain and improve their own health. Using social media can improve people's access to health information, as well as promote positive behavior change. Social media can be an excellent tool with wide reach and interactivity. Some empirical evidence has found it interesting to use social media for disease prevention interventions (Leonita & Jalinus, 2018). This study raised health promotion regarding leprosy carried out by the method of content analysis of health promotion media in the form of posters and videos containing education and prevention related to leprosy. Instagram is an application that is in demand by many people, apart from just for personal use, the use of Instagram can also be used as a promotional medium, one of which is health promotion (Andriani et al., 2022). Instagram social media shows that communication in the form of creatively presented photos makes Instagram one of the important factors in attracting the attention of the public using social media (Casmira et al., 2022).

This research was conducted through social media instagram by the account: @komkes.ikmb22. Social media users, especially Instagram, are the subjects of this activity. This research was conducted by students of Public Health Sciences, State University of Malang Offering B 2022. Followers of the @komkes.ikmb22 account aged 16-25 years when this leprosy health promotion activity was carried out amounted to around 30 people. The followers are spread across various regions in Indonesia with the largest percentage being in Malang.

This research uses a descriptive research method of content analysis. The content analyzed is posters and educational videos related to leprosy found on the @komkes.ikmb22 Instagram account. The stages carried out in this research are: 1) formulation of material related to leprosy education and prevention, 2) Making health promotion media related to leprosy.





The first stage is the formulation of the material, but before that, we must analyze the respondents to adjust to the material to be presented. The purpose of respondent analysis in the context of content analysis is to identify and describe the characteristics of respondents involved in a study (Rozali, 2022). This can include an overview of the demographic characteristics of respondents, such as age, gender, education, and occupation (Asfar, 2019). In addition, respondent analysis can also aim to understand respondents' views, attitudes, or behaviors related to certain research topics. Thus, respondent analysis helps researchers to understand who is the subject of research, so that research results can be interpreted better (Budiarti et al., 2022). After that, the material formulation stage. The material presented in the health promotion media is related to the negative stigma of leprosy, what is leprosy, symptoms of leprosy, myths and facts related to leprosy along with tertiary prevention of leprosy.

The second stage is the creation of health promotion media related to leprosy. The process of making health promotion media in the form of posters is done through the Canva application. Canva was chosen for designing because it has various advantages, namely: 1) easy access and use, 2) Has a variety of features and attractive designs, 3) Flexibility. Health promotion media that have been distributed will be analyzed for content. Analysis is carried out on health promotion media in the form of posters or videos based on likes, viewers and shares on educational content about leprosy prevention on the @komkes.ikmb22 Instagram account.

RESULTS AND DISCUSSION

Leprosy is an infectious disease that still requires special attention. This is because there is still a negative stigma from the community towards people with leprosy. This stigma is caused by cultural misconceptions and symptoms of leprosy, with the main manifestations of stigma being avoidance, exclusion, and concealment of the disease which has the main impact of social isolation from the community and shame. Patients with symptoms that are visible on the body and not covered by clothing are often considered an 'abnormal' condition, even though they have recovered from the disease. This leads to greater stigma and a smaller scale of social interaction for people with leprosy if their symptoms are more visible.

Social stigma and discrimination can hinder the discovery of new cases, hamper efforts to cure the disease, and reduce the quality of life of people with leprosy (Setyowati, 2022). Ostracism and concealment of the disease diagnosis are the most common manifestations of stigma. Examples of this form are people's reluctance to buy goods or accept food from people with leprosy, dismissal from work, reluctance to shake hands, and unrest when in the same room. This results in leprosy sufferers choosing to hide their disease from coworkers, family and community members. One way to help reduce stigma and discrimination against leprosy is first and foremost to understand the course it takes, its symptoms and transmission, and the various forms of stigma that exist.

From these obstacles, health promotion efforts related to leprosy are needed, starting from symptoms and transmission as well as forms of tertiary prevention to remove negative community stigma, discrimination, and prevent disability in leprosy sufferers so as to improve the quality of life of sufferers (Hasbia, 2020).





In the current era of technological advancement, social media plays a very important role in disseminating information to the wider community. Social media can be a source of information that is easier and faster to obtain because it is easily accessible to its users, one of the social media platforms that is increasingly being used today is Instagram. Instagram is a form of communication that can be used easily and can reach a wide range of targets. Users can share information in the form of photos or videos called updates. In addition to the use of social media as a health promotion platform, the selection of the type of health promotion media is also important where in this health promotion, posters were chosen as one of the promotional media because of the characteristics of posters that can attract readers, such as the use of concise and concise sentences, the use of color composition and attractive animated images. Not only that, in addition to the selection of platforms and types of health promotion media, the application of health promotion strategies is also important to attract readers, one of the strategies applied in the distribution of health promotion media, namely routinely sharing posts so that they can reach a wider target.

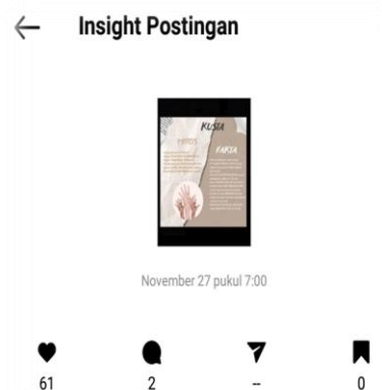


Figure 1. Screenshot of the Post's Insights on Instagram

Of the 30 followers of the @komkes.ikmb22 account, it can be seen that the number of interacting accounts resulted in 61 likes and 2 comments, meaning that the uploaded health promotion media was able to reach targets outside the account followers twice as much. This shows that posters as health promotion media are quite effective as a form of education for the wider community.

Currently, health promotion can be conducted through various types of media, such as print media (booklets, leaflets, flyers, flipcharts, rubrics, magazines, and posters) and electronic media (TV, radio, movies, video films, cassettes, CDs, and VCDs) (Surahman & Supardi, 2016). As one of the health promotion media, posters were chosen as the educational media for tertiary prevention of leprosy to deliver health messages to the community. The content of this poster message includes tertiary prevention of leprosy, namely self-care methods to prevent disability and myths and facts related to leprosy to increase public understanding so as to remove the negative stigma and discrimination against leprosy sufferers. The following are the characteristics of the poster media.





a. Design and Content

Health promotion posters can be designed to include images, text and designs that attract the attention of the audience. Poster content can include information relevant to the topic of tertiary prevention of leprosy, such as symptoms, prevention, and prevention of leprosy.

b. Effectiveness

Posters can be an effective tool in conveying health information and messages to audiences, especially to those who have low awareness about leprosy and its prevention. In addition, posters can also be a tool to increase collaboration and cooperation between the government, health stakeholders, and communities in preventing leprosy.

Challenges for Tertiary Prevention of Leprosy in the Future

The rapid advancement of technology today can provide convenience in various ways, one of which is health promotion. However, it does not rule out the possibility that technological developments can actually have some negative impacts on the delivery of health messages or information, such as the widespread distribution of information that cannot be justified or hoaxes. The spread of hoax information in tertiary prevention of leprosy can take the form of myths and bad stigma related to leprosy, which can prevent people with leprosy from accessing follow-up care to prevent permanent disability. Such stigma can also hinder people from living socially or interacting with people around them, which can result in a decrease in their quality of life. In addition, it can cause economic problems and stigmatization for patients and their families (Simanjutak et al., 2022). Stigmatization of sufferers and their families can lead people to avoid them for fear of infection (Parlaungan et al., 2023).

Solutions to the Challenges

The ease of health promotion through social media can also have negative impacts, such as the spread of hoax information related to leprosy, tertiary prevention of leprosy, and the stigmatization of leprosy sufferers. Some of these negative impacts can prevent leprosy sufferers from implementing tertiary prevention due to shame, exclusion, and discrimination in obtaining health services in the form of follow-up care to prevent disability and improve the quality of life of sufferers. Here are some solutions that can be done to overcome the spread of hoaxes related to the bad stigma of leprosy on social media.

- Improve social media literacy to be able to sort out correct information and identify hoaxes.
- Using the right diction or language selection in the sense that it does not reinforce the negative stigma against leprosy in any information disseminated.
- Verifying any information received to ensure its veracity before disseminating the information.
- Involving authorities, such as the Ministry of Health, in disseminating accurate information and correcting leprosy-related hoaxes.

CONCLUSIONS

Health promotion related to leprosy management by utilizing social media is the right thing to do in today's digital era. This promotional activity was carried out by utilizing one of





the social media platforms loved by teenagers, namely through Instagram social media with the account @komkes.ikmb22. The enthusiasm of Instagram users can be seen from the responses given to the uploaded posters, namely by giving 61 likes and 2 (two) comments on the leprosy tertiary prevention poster. This figure shows that health promotion activities have succeeded in attracting the attention of Instagram users at large by obtaining the number of likes exceeding 2 (two) times the followers of the @komkes.ikmb22 account or equivalent to 203% of the followers who liked the poster. Posters that are neatly packaged and attractive by displaying concise sentences, appropriate animations, and diverse colors are one of the supporting factors for Instagram users to respond.

Health promotion activities on leprosy conducted through social media are expected to increase knowledge and minimize stigma in the community. With the increase in public knowledge related to leprosy, both symptoms and tertiary prevention, it can facilitate medical personnel in providing treatment to leprosy sufferers so that their quality of life becomes better.

Acknowledgement

We would like to express our deepest gratitude to all those who have contributed to the success of this research.

1. First, we would like to thank Mr. Ronal Surya, S.Kep., Ns., M.Kep as the lecturer of the Health Communication Course who has provided direction and support in carrying out this research.
2. Thank you to all members of group 3 (three) who have exerted all their energy, thoughts, and time to carry out this research.

Hopefully, this research will not only provide understanding to the public about leprosy. However, it can provide support to people with leprosy to fight their disease. Finally, I hope this research can be useful for all parties and in the future.

Funding Source

The research carried out did not receive financial support or sponsorship from any party.

Conflict of Interest

The authors declare that there is no conflict of interest regarding this article.

REFERENCES

- Abdillah, U. R., & Azam, M. (2016). Pendidikan Kesehatan Sebagai Upaya Peningkatan Pengetahuan, Sikap, dan Praktik Deteksi Dini Kusta. *Journal of Health Education*, 1(2), 9–14.
- Andriani, P., Yustisiani, R., Umaroh, A. K., Sebagai, A. I., Promosi, M., Dinas, K., Kabupaten, K., & Abstrak, N. (2022). Instagram Analysis as Health Information media in Health office of Ngawi Regency. *The 16th University Research Colloquium 2022 Universitas Muhammadiyah Pekajangan Pekalongan*, 703–713.
- Anisa, R., & Dewi, R. (2022). Media Promosi Kesehatan Rumah Sakit Umum Daerah Lembang. *Jurnal Ilmiah Multidisiplin*, 1(7), 1919–1924.





- Asfar, A. (2019). *Analisis Naratif, Analisis Konten dan Analisis Semiotik*. January. <https://doi.org/10.13140/RG.2.2.21963.41767>
- Bratschi MW, S. P. (2015). Current knowledge on Mycobacterium leprae transmission: a systematic review. *Lepr Rev* , 142-155.
- Budiarti, E. M., Kusumaningrum, D. E., Zulkarnain, W., Sumarsono, R. B., Burham, A. S. I., & Bengen, E. J. (2022). Pelaksanaan Tugas Profesi Guru Melaksanakan. *Jurnal Administrasi Dan Manajemen Pendidikan (JAMP)*, 5(1), 71–76.
- Dinkes Jawa Timur. (2014). *Profil Kesehatan Provinsi Jawa Timur 2014*.
- Dinkes Jawa Timur. (2015). *Profil Kesehatan Provinsi Jawa Timur 2015*.
- Dinkes Jawa Timur. (2016). *Profil Kesehatan Provinsi Jawa Timur 2016*.
- Hasbia. (2020). Kusta: Siapa Takut?. *Doctoral dissertation, Politeknik STIA LAN Makassar*.
- Ida Samidah, M. M. D. A. R. S. J. S. E. P. S. W. R. E. Elpina. (2023). Edukasi Dan Pemeriksaan Penyakit Kusta Dan Frambusia Di RT 27 Dusun Besar Wilayah Kerja Puskesmas Jembatan Kecil. *Jurnal Dehasen Untuk Negeri*, 2(1), 79–84. <https://jurnal.unived.ac.id/index.php/dehasenuntuknegeri/article/view/2872>
- Jadha Casmira, O., Widjanarko, B., & Margawati, A. (2022). Promosi Kesehatan Melalui Media Sosial Instagram Sebagai Sarana Edukasi. *Husada Mahakam: Jurnal Kesehatan*, 12(2), 114–124.
- Kemenkes. (2014). *Buku Saku Pengendalian Kusta*. Jakarta.
- Leonita, E., & Jalinus, N. (2018). Peran Media Sosial Dalam Upaya Promosi Kesehatan: Tinjauan Literatur. *INVOTEK: Jurnal Inovasi Vokasional Dan Teknologi*, 18(2), 25–34. <https://doi.org/10.24036/invotek.v18i2.261>
- Noratikasari, P. D., Ariyanto, Y., & Ririanty, M. (2020). Peran Kelompok Perawatan Diri (KPD) dalam Upaya Mencegah Peningkatan Kecacatan pada Penderita Kusta. *Jurnal Promosi Kesehatan Indonesia*, 15(1), 22. <https://doi.org/10.14710/jpki.15.1.22-30>
- Pandhika, D. A., Stiawati, T., & Jumiati, I. E. (2023). Utilization of Social Media as a Health Promotion Tool of Indonesian Hospitals: Literature review. *Faitehan Health Journal*, 10(02), 131–136. <https://doi.org/10.33746/fhj.v10i02.502>
- Parlaungan, J., Momot, S. L., Tambunan, S. G., & Purwana, E. R. (2023). Deteksi Dini Berbasis Web Terhadap Upaya Guru SD Dalam Pencegahan Penyakit Kusta Di Kota Sorong. *AKSARA: Jurnal Ilmu Pendidikan Nonformal* , 331-337.
- Rees RJ, Y. D. (2014). Microbiology Leprosy. In O. D. Hastings RC, *Microbiology essentials and applications 2nd ed* (pp. 49-83). London: Churchill Livingstone.





- Rifa'i, R. (2020). Role Model Pendekatan Edukatif Health Promotion Terhadap Penurunan Stigma Masyarakat Tentang Penyakit Kusta. *Media Keperawatan: Politeknik Kesehatan Makassar*, 11(1), 20. <https://doi.org/10.32382/jmk.v11i1.1545>
- Rozali, Y. A. (2022). Penggunaan Analisis Konten Dan Analisis Tematik. *Penggunaan Analisis Konten Dan Analisis Tematik Forum Ilmiah*, 19, 68. www.researchgate.net
- Setyowati, K. (2022). ANALISIS FAKTOR YANG MEMPENGARUHI STIGMA PADA PENDERITA KUSTA LITERATURE REVIEW. *Doctoral dissertation, STIKES HANG TUAH SURABAYA*.
- Simanjutak, A. M., Marbun, P. D., & Anggraini, Y. E. (2022). Infeksi Kusta Pasca Infeksi Covid-19: Ancaman Penyakit Tropis Terabaikan Pasca Pandemi Bagi Indonesia. *JIMKI: Jurnal Ilmiah Mahasiswa Kedokteran Indonesia*, 35-44.
- Singal A, C. N. (2016). Childhood Leprosy . In K. H. Kumar B, *Indian association of leprologist textbook of leprosy 3rd ed* (pp. 325-332). New Delhi: Jaypee Brothers.
- Surahman, & Supardi, S. (2016). *Ilmu Kesehatan Masyarakat PKM*. Jakarta: Pusdik SDM Kesehatan Badan Pengembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan.

