



Innovation Trends: Utilization of Social Media and Interactive Video in Leprosy-Related Health Promotion

Aulia Gayo Dwi Ardianti*, Citra Kirana Hutami, Ni Made Dwiastini Sucita

Universitas Negeri Malang, Malang, Indonesia

Email: aulia.gayo.2206126@students.um.ac.id

ABSTRACT

Leprosy is an infectious disease caused by Mycobacterium Leprae. This disease has become a health problem in several countries, one of which is Indonesia. The impact of leprosy is physical, economic and psychological disability. Health promotion is an effort by individuals and communities to increase their abilities in several factors that influence health so that they can improve their health. Health promotion activities regarding leprosy are carried out by making videos regarding education the prevention of leprosy using promotional media in the form of Instagram. The method used is qualitative content analysis from educational videos related to leprosy which are posted on the Instagram page @komkes.ikmb.22. There are 2 processes in this activity: 1) formulation of material and content ideas related to leprosy prevention; and 2) creating leprosy health promotion media. Leprosy education using social media can be done by disseminating accurate and educative information about leprosy through social media platforms and not causing discrimination against leprosy sufferers. Instagram can be used as a means of health promotion and health communication tool to fight leprosy. Instagram is effective medium, because it is widely used and has a large number of active users. The Indonesian Ministry of Health stated that there are still a number of challenges in eliminating leprosy cases in Indonesia. Therefore, an effective solution is needed to overcome this. Through social media, especially Instagram, it is hoped that efforts to deal with leprosy in society will become more systematic, comprehensive and effective.

KEYWORDS

Leprosy, Instagram, Social Media, Health Promotion, Prevention

Received: 10 December 2023

Revised: 10 October 2024

Accepted: 1 December 2024

How to cite: Ardianti, Aulia Gayo Dwi. (2024). *Innovation Trends: Utilization of Social Media and Interactive Video in Leprosy-Related Health Promotion. Inov Local Empowerment Mass in Developer Sustainable*, 2(2): 67-76.





INTRODUCTION

Leprosy (Leprosy) is an infectious disease caused by *Mycobacterium Leprae*. This disease has become a health problem in several countries, one of which is Indonesia. This is because it can cause very complex problems, starting from medical, social, economic and cultural aspects (Irham et al., 2021). The level II disability rate for leprosy has now been successfully reduced from 8.71 per 1,000,000 population in 2012, and in 2013 to 6.82 per 1,000,000 population. There are two terms for levels of disability in leprosy sufferers, namely levels I and II. Grade I defects are defects that are not yet visible or there are no changes in the anatomy. Meanwhile, level II disability means visible changes have occurred in the anatomy of leprosy sufferers (Rokom, 2015).

Most leprosy sufferers suffer from >15 years of age, and more men than women. Until now, leprosy is greatly feared by people, even health workers. This is due to a lack of knowledge or understanding, wrong beliefs about leprosy and the defects it causes (Irham et al., 2021).

This disease is a type of granulosa disease of the peripheral nerves and mucosa of the upper respiratory tract, and lesions of the skin. This disease attacks the peripheral nerves, skin, mucosa (mouth), upper respiratory tract, reticuloendothelial system, eyes, muscles, bones and testicles. If not treated immediately, leprosy can develop very quickly and cause damage to the skin, nerves, limbs and eyes (Yusuf et al., 2018). Apart from that, it can also infect other people through close contact, through splashes of fluid from the respiratory tract (droplets), namely saliva or phlegm, which comes out when coughing or sneezing, and over a long period of time. However, leprosy is not transmitted by shaking hands or sitting together. Leprosy is not transmitted from mother to fetus. Not only that, there are also other factors that cause a person to suffer from leprosy, namely coming into contact with animals that spread leprosy bacteria (Armadillos), living in or visiting leprosy endemic areas, and having an immune system disorder (Yunar, 2023). If it has been treated but the sufferer does not take medication regularly, the leprosy in the body will grow and develop more, damaging the sufferer's nerves which can ultimately lead to disability (Yusuf et al., 2018).

The impact of leprosy is disability, not only from a physical perspective that can interfere with daily activities and social participation, but also has an economic and psychological impact. Leprosy disability occurs due to impaired nerve function in the eyes, hands and feet. The longer the time from when early signs are first discovered until treatment begins, the greater the risk of resulting disability the occurrence of progressive nerve damage (Irham et al., 2021). In addition, in the long term, this disease can result in some parts of the sufferer's body not being able to function normally (skin, upper respiratory tract mucosa, radius bones and face) (Yusuf et al., 2018).

According to the WHO region, at the beginning of 2006 it was estimated that the number of new leprosy sufferers in the world in 2005 was around 296,499 cases, of which the largest number were in the Southeast Asia region (201,635), followed by the African region (42,814), America (41,780) and the rest. in other regions of the world (P2 Kusta, 2006: 5). From the distribution list of leprosy during 2005, 17 countries reported 1000 or more new case detections (case detection rate/CDR), and these countries contributed 94% of all new case discoveries in the world. Of the 17 reporting countries, Indonesia (19,695 cases) ranks second after Brazil (38,410 cases) (P2 Leprosy, 2006: 7) (Rasyid & Wilutono, 2022).

According to the Ministry of Health (2015), the disability rate in Indonesia due to grade II leprosy has now been successfully reduced, from 8.71 per 1,000,000 population in 2012, and to 6.82 per





1,000,000 population in 2013. There are two terms for levels of disability in leprosy sufferers, namely levels I and II. Grade I defects are defects that are not yet visible or there are no changes in the anatomy. Meanwhile, level II disability means visible changes have occurred in the anatomy of leprosy sufferers (Rokom, 2015).

The most important treatment for leprosy is to break the chain of transmission, reduce the incidence the disease, treat and cure sufferers, and prevent disability. (Makarim, D. F., 2022). One of them is chemotherapy which is carried out with DDS (diaminodiphenyl sulfone) as a single drug. The MDT (Multidrug Therapy) treatment program begins as soon as a person is diagnosed with leprosy. (Rasyid, M., & Wilutono, N., 2022). This medicine must be taken by mouth for 3-5 years for PB paucibacillary patients/dry leprosy sufferers) and 5-10 years for MB (multibacillary patients/wet leprosy sufferers), it can even last a lifetime. (Dr. Zuhriana K. Yusuf M., 2018). The doctor will also give anti-inflammatory drugs to control nerve pain and damage related to leprosy, for example steroids. Apart from that, leprosy can be treated with surgery which aims to normalize the function of damaged nerves, improve the shape of the sufferer's deformed body, and restore the function of the body's limbs (Makarim, 2022). Therefore, before someone suffers from leprosy, it would be better to promote health by increasing knowledge and prevention. One of them is education through social media.

MATERIALS AND METHODS

According to the World Health Organization (WHO), health promotion is an effort by individuals and communities to increase their abilities in several factors that influence health so that they can improve their health. The concept of health promotion is not only a process of public awareness in terms of providing and increasing knowledge in the health sector, but also as an effort that is able to bridge behavioral changes, both in society and in organizations and the environment (Nurmala et al., 2018). To improve and maintain public health with health promotion, you can use several methods, one of which is social media. Currently, social media has begun to develop rapidly along with the times, especially in the health sector. Social media has shown its role in health promotion efforts in the world (Leonita & Jalinus, 2018). Health promotion activities regarding leprosy are carried out by making videos regarding education regarding the prevention of leprosy using promotional media in the form of Instagram. Instagram is not only the only social media that is growing rapidly, but also a virtual social space where people visit Instagram 45% longer than other social media. Several studies have been conducted regarding the use of Instagram as a health promotion medium (Wulantari & Rahmayanti, 2019). This health promotion activity uses Instagram in the form of video uploads via the Instagram page @komkes.ikmb.22. This activity was carried out by Public Health Students at Offering B, State University of Malang.





Social media users, especially Instagram, are the subjects of this health promotion activity. The followers of the @komkes.ikmb.22 account are 30 people with an age range of 16-25 years. When health promotion activities regarding leprosy were carried out, followers were spread across various regions in Indonesia with the largest percentage being in Malang.

The method used is qualitative content analysis from educational videos related to leprosy which are posted on the Instagram page @komkes.ikmb.22. There are 2 processes in this activity: 1) formulation of material and content ideas related to leprosy prevention; and 2) creating leprosy health promotion media.



The first stage that must be carried out in this activity is the formulation of material and content ideas related to leprosy prevention. Before preparing the material to be presented, there is an analysis of the respondents and the formulation of the material. The purpose of conducting respondent analysis is to provide an overview of what you want to know about the condition of the respondents who will be the sample in the research (Nainggolan et al., 2020). Next is the material formulation stage which aims to provide material that is appropriate, interesting and easy to understand so that the audience understands the material that will be presented. The material presented in the video is an early step to prevent leprosy through CERDIK, namely C= Look for information about the dangers of leprosy, E= Eliminate disease-causing microorganisms, R= Be diligent in exercising, D= Have a balanced nutritional diet, I= Get enough rest, and K =Manage the cleanliness of the surrounding environment.



In the second stage, there is the creation of health promotion media for leprosy in the form of a video of steps to prevent leprosy through CapCut media. CapCut is a video editing application for creating quality content without needing to master in-depth technical skills. The CapCut application is a video editing application that is popular among students because of its ease of use. One of the main features offered by CapCut is the use of templates which can make video editing easier (Syahmewah, 2023). In the video there is also text that makes it easier for viewers to read and there are elements that make the video interesting to watch.



The data that has previously been obtained will be subjected to content analysis. The analysis was carried out based on an insight reel with 1,130 viewers, 88 likes and 20 comments. With this video, it is hoped that viewers who see it will understand the steps to prevent leprosy on Instagram feeds @komkes.ikmb22.

RESULTS AND DISCUSSION

Leprosy Education Through Social Media

Leprosy in Indonesia is still a complex problem, with a number of provinces not yet achieving national elimination of leprosy cases. Efforts to increase people's knowledge and attitudes, especially housewives, towards leprosy through health education are considered important for implementing early detection practices and alleviating stigma related to this disease (Abdillah & Azam, 2016)

Social media on the internet has great potential to promote health and other health interventions, and makes it easier to achieve goals at every level. Therefore, this paper must provide a theoretical explanation of: 1) the importance of health promotion and the use of social media; 2) characteristics of social media and their weaknesses; and 3) the role of health professionals in promoting health through social media (Leonita & Jalinus, 2018).

Leprosy education using social media can be done by spreading accurate and educative information about leprosy through social media platforms. This can help increase public awareness about leprosy, remove the associated stigma, and encourage effective prevention efforts. Social media can also be used to promote leprosy prevention programs and invite the public to participate in these programs.

In the process of conducting leprosy education using social media, it is important to pay attention that the information disseminated must be accurate and not cause discrimination against leprosy sufferers. The media, student press and citizen journalists must play an important role in overcoming hoaxes, myths and stigma surrounding leprosy and convey valid and inclusive information without creating stigmatization and discrimination. The media can also make people understand about preventing or dealing with leprosy correctly. Social media such as Instagram, Facebook and other platforms have become effective tools for reaching a wider and more diverse audience.

Social media used in leprosy education includes platforms such as:

- a. Facebook





This platform is a popular social media and is often used to disseminate information about leprosy, including educational and accurate information.

b. Google

Google is also a tool that is often used to search for information about leprosy and disseminate accurate information.

c. Instagram

Based on the research results, Instagram can be used as a means of leprosy education through social media. Although in existing research, social media such as Facebook and Google are more dominantly used, Instagram has also been used by various parties, including the Indonesian Ministry of Health, to disseminate information about leprosy and efforts to eliminate stigma and discrimination related to leprosy. Apart from that, research also shows that people are expected to be more proactive in seeking information via social media about how to treat leprosy, so that they can improve the status of socialization regarding leprosy. Therefore, Instagram can be an effective means of leprosy education through social media, especially in efforts to increase public awareness and reduce the stigma associated with leprosy.

Instagram is an important media for health education

The social media with the largest number of users in Indonesia is Instagram. According to the we are social report, in 2023 Indonesia will occupy the 4th largest position in the world with around 103.3 million users. There is a lot of educational content on Instagram that shares content, especially health educational content, that is free and easy to access. Instagram social media as a means of disseminating health information can provide knowledge for Instagram users and can become a behavioral change in maintaining public health.

The use of social media is growing rapidly from year to year and is used not only as communication but also as a means of learning and delivering various kinds of education, one of which is health education. The ease of accessing social media information and educational content quickly and easily is driving the increasing use of social media in Indonesia. Apart from that, there are many features on social media that can be utilized so that messages or information can be conveyed more interestingly (Nurlatipah, 2023)

Instagram social media applications can be used as a means of education seen from the assessment of Instagram media management based on the dimensions of context, communication, collaboration, and connection (Jadha Casmira et al., 2022). Conveying information through social media is very important to increase public health awareness, especially Instagram social media. Instagram can be used as a means of health education promotion and as a health communication tool. Instagram can be used to collect information about diseases, manage health information, and provide information about health services and health promotion.

Instagram is an effective health education promotion medium, because it is widely used by the younger generation and has a large number of active users. Apart from being able to display reels video, images, and shareable posts, instagram can also serve as a media for educational discussions. Instagram shows where communication presented creatively is an important enough factor to attract attention, in this case showing a significant influence between Instagram social media on public interest, evidenced by the number of viewers as many as 1121 who exceed the number of followers on the Instagram account which is 30 followers, social media is considered effective in spreading information.



Theme

The video theme on health promotion for primary prevention of leprosy is a theme that is currently in demand by the public. As is known, the rate of leprosy has begun to increase in the last few weeks, so to take preventive steps as a public health expert you must be wise in dealing with this matter. Video tutorials are effective for based learning to prevent leprosy because video-based health promotion can facilitate processing information more quickly, retaining knowledge and remembering it accurately. About 90% of the information received from the outside world to survive and develop is in visual form. Because basically, humans have the ability to process images 60,000 times faster than plain text. Video-based learning has often proven to be more effective than traditional classroom learning.

By using videos, there are many creative ways that knowledge can be presented so that the target can really understand the steps to prevent leprosy. Video-based health promotion includes: animation, live action, short video tutorials, documentaries, vlogs, and others. These types of videos are not only interesting but can also be used to explain concepts better than text. This tutorial video is 15 seconds long and uses elements related to the material to be presented as well as the voices used by the actors in giving the tutorial in a tone that tends to be happy and inviting. These things are done so that the target or reach of the video does not get bored of watching health promotion videos with the theme of diseases that are not often found in the modern era (Binus University, 2019).

Future Challenges and Solutions

Leprosy is a health problem that still occurs frequently in Indonesia. Moreover, based on data from the World Health Organization (WHO) in 2020, Indonesia is the third largest contributor of new leprosy cases in the world after India and Brazil with around 8% of the world's cases. In 2021 there were 7,146 new leprosy patients, with a proportion of children of 11% (data as of January 24, 2022). A total of 26 provinces and 401 districts/cities have achieved leprosy elimination, but there are still 6 provinces and 101 districts/cities that have not yet eliminated leprosy (Direktorat Jenderal Pencegahan dan Pengendalian Penyakit, 2021).

According to the Ministry of Health, leprosy elimination in Indonesia is still faced with many challenges. Future challenges related to leprosy still involve several factors that need to be addressed:

- a. **Stigma and Discrimination:** One of the main challenges in the prevention and control of leprosy in Indonesia is the stigma and discrimination attached in the community towards families and people with leprosy which causes them to have delays in early detection and treatment of leprosy. Leprosy sufferers also experience reduced self-confidence, self-esteem and disrupted psychological well-being, which limits their access to health services and public facilities, disrupts their education and employment. This makes them choose to isolate themselves from their family, friends and social environment. A major factor in the stigma of leprosy is the lack of knowledge and awareness of the community about the causes, transmission, early prevention, diagnosis, treatment and rehabilitation
- b. **Access to Care:** in some parts of Indonesia, especially remote or less developed areas, access to health services for diagnosis, treatment and care of leprosy is still very limited
- c. **Drug Development and Distribution:** while there are effective treatments for leprosy, developing better drugs and making them more affordable and available worldwide remains a challenge
- d. **Monitoring and Preventing the Spread of Leprosy:** infection control and patient monitoring are important parts of preventing the spread of the disease



- e. Post-Cure Care: after a period of cure, people with leprosy often find themselves in need of follow-up care to address long-term impacts such as nerve damage, physical disability, and psychological distress due to stigma and discrimination.

With several challenges that become problems in dealing with the spread of leprosy, there are steps to overcome the challenges of leprosy, some of the solutions that can be applied are as follows:

- a. Community Education and Awareness: education programs are conducted through activities to educate the community about leprosy, its symptoms, transmission, and treatment. Public awareness programs are also carried out with campaign activities that can help reduce stigma and increase public knowledge about leprosy so that people are more accepting and respectful of people with leprosy. This can be one way to overcome stigma and discrimination in the community.
- b. Access to Health Services: efforts to improve access to basic health services, including initial screening and treatment of leprosy, are essential. Mobile clinics can help remote areas access services.
- c. Partnerships and Research: collaboration between government, non-governmental organizations, and the private sector to develop better drugs, as well as investing funds in research and development, can bring breakthroughs in leprosy treatment
- d. Disease Monitoring and Control: effective monitoring programs and early warning systems can help identify new cases quickly and prevent the spread of the disease.
- e. Post-Cure Support: social support and rehabilitation programs for those who have recovered from leprosy can help them cope with the long-term impacts that may arise. Through a holistic approach involving various parties, including government, health institutions, civil society, and the private sector

In addition, the role of social media also provides a solution to increase understanding of leprosy by conducting activities in the form of health promotion through social media as an attraction among the community, namely Instagram. One form of promotion presented on social media Instagram is in the form of a video containing primary prevention before someone is exposed to leprosy. One of the goals of making videos is to increase public awareness, knowledge and attitudes towards leprosy and minimize the circulation of stigma and discrimination experienced by leprosy sufferers. By implementing strategies through social media, it is hoped that efforts to deal with leprosy in the community will become more systematic, comprehensive and effective.

CONCLUSIONS

Leprosy education and health promotion using social media is considered effective because it can help increase public awareness about leprosy, eliminate the associated stigma, and encourage effective prevention efforts. Social media can also be used to promote leprosy prevention programs and invite the public to participate in these programs. Social media such as Instagram, Facebook and other platforms have become effective tools for reaching a wider and more diverse audience. Instagram can be an effective means of leprosy education through social media, especially in efforts to increase public awareness and reduce the stigma associated with leprosy. Instagram proves that health communication about leprosy prevention which is presented creatively is an important factor in attracting attention, in this case showing the significant influence of Instagram social media on audience interest, as evidenced by the number of video viewers about leprosy prevention reaching 1121 which exceeds The number of Instagram account followers is 30 followers. With this, social media is considered effective in disseminating information. Even though the challenge of



overcoming leprosy in Indonesia is still quite complicated, the presence of social media, especially Instagram, can be the right solution to prevent leprosy.

Acknowledgement

Thanks to the Instagram account @komkes.ikmb22 for providing a place to conduct this research this research. Our gratitude also goes to Mr. Ronal Surya Aditya who has guided us in conducting this research. In addition, we would also like to thank other parties who have helped so that this research can be carried out well

Conflict of Interest

The authors affirm that they have no known financial or interpersonal conflicts that would have appeared to have an impact on the research presented in this study.

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).
- Binus University. (2019). *Manfaat Video Based Learning dan Tips untuk Membuatnya*.
- Direktorat Jenderal Pencegahan dan Pengendalian Penyakit. (2021, January 29). *Pravalensi Kusta Pada Anak Tinggi, Temukan Kasusnya, Periksa Kontak dan Obati Sampai Tuntas*. Kementerian Kesehatan Republik Indonesia.
- Irham, F., Fauji, A., Astuti, P., & Prima, A. (2021). Faktor-Faktor Yang Mempengaruhi Kejadian Kecacatan Pada Pasien Kusta: Literature Review. *Jurnal Keperawatan Muhammadiyah*, 6(4).
- 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.
- 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>
- Makarim, F. R. (2022, May 24). *Kusta*. Halodoc.
- Nainggolan, N., Maarif, S., & Sukmawati, A. (2020). Analisis Faktor yang Mempengaruhi Kinerja Pegawai: Studi Kasus Bank XYZ. *Riset Ekonomi Manajemen*, 3(2), 109–124.
- Nurlatipah, A. (2023). *Efektivitas Penggunaan Media Sosial Instagram Sebagai Media Edukasi Pernikahan dalam Meningkatkan Kesiapan Berkeluarga Followers Akun Instagram @Nikahinstitute*.



- Nurmala, I., Rahman, fauzie, Nugroho, A., Elyani, N., Laily, N., & Anhar, V. Y. (2018). *Buku Promosi Kesehatan*. Airlangga University Press.
- Rasyid, M., & Wilutono, N. (2022). Implementasi Home Care Pada Pasien Kusta di Desa Bitahan Kecamatan Lok Paikat Kabupaten Tapin Kalimantan Selatan. *Jurnal Skala Kesehatan*, 13(1).
- Rokom. (2015, January 16). *Penyakit Kusta Bisa Disembuhkan Tanpa Cacat, Kuncinya Berobat Tuntas*.
- Syahnemah, R. (2023). Pengaruh Penggunaan Template Pada Aplikasi Capcut yang Memudahkan Mahasiswa untuk Mengedit Video Sebagai Media Pembelajaran. *Journal of Physics and Science Learning*, 07(1), 27–32.
- Wulantari, A., & Rahmayanti, Y. (2019). Gambaran Pengguna Media Sosial Facebook Dan Instagram Dalam Promosi Kesehatan Bahaya Merokok. *Jurnal Riset Dan Inovasi Pendidikan*, 1(2), 47–55. <http://jurnal.abulyatama.ac.id/index.php/kandidat>
- Yunar, M. F. (2023, August 7). *Mengenal Penyakit Kusta*. Kementerian Kesehatan Direktorat Jenderal Pelayanan Kesehatan.
- Yusuf, Z. K., Paramata, N. R., Dulahu, W. Y., Mursyidah, A., Soeli, Y. M., & Pomalango, Z. (2018). *Kupas Tuntas Penyakit Kusta*. Ideas Publishing.