



## GENERAL DESCRIPTION OF PUBLIC KNOWLEDGE ABOUT SKIN DISEASES IN THE BELAWAN COASTAL AREA

**Nurhayati \*, Naya Kurnia Fadillah, Rahmah Aprida, Aqila Najwa, Algi Falah Siregar**

Universitas Islam Negeri Sumatera Utara

Jl. Lap. Golf No. 120, Kab. Deli Serdang, 20353, Medan, Sumatera Utara, Indonesia

Email: [nurhayati1672@uinsu.ac.id](mailto:nurhayati1672@uinsu.ac.id)

### Abstract

Skin diseases are a significant health problem worldwide, including Indonesia, with a higher prevalence in developing countries. This study aims to explore the picture of public knowledge regarding the high incidence of skin diseases in the coastal area of Belawan, Medan City. The method used was a quantitative study with a cross-sectional design, involving 70 respondents from the local community. The results showed that more than 50% of respondents had sufficient knowledge about skin diseases, although there were still groups who did not understand this condition, especially residents who work as fishermen aged 41-50 years. Knowledge about the prevention and treatment of skin diseases is closely related to healthy living behavior, where education is an important factor in increasing public awareness. In addition, easy access to information through technology and health education has been shown to contribute to improving individual understanding of skin diseases. Therefore, collaboration between the government, health institutions, and communities is needed to provide accurate and easily accessible information. A more educated community will be better able to maintain their skin health and reduce the prevalence of skin diseases in their environment. This study emphasizes the importance of increasing knowledge and access to information as a strategic step in efforts to prevent skin diseases in coastal areas.

**Keywords:** Knowledge, Skin Disease, Coast

### Introduction

Skin diseases are still a public health challenge throughout the world, including Indonesia. Some common skin disorders include dry, scaly skin on the hands, feet, or face, acne, rough skin texture, rashes, skin inflammation, and abrasion or loss of the epidermis layer (Dhermawan et al., 2021). Skin diseases can be caused by various types of microorganisms, including viruses, bacteria, fungi, and parasites (Harlim, 2019).

Skin diseases are one of the most common infections compared to other health problems, affecting around 900 million people worldwide. Various studies have shown that the prevalence of skin diseases is higher in developing countries, with figures ranging from 20-80%. In 2015, there were 27,860 new visits to hospitals for skin and subcutaneous tissue diseases throughout Indonesia (Kemenkes, 2015). This figure increased to 29,559 new cases in 2016 (Kemenkes, 2016).

Cases of skin diseases in North Sumatra were recorded at 2.63 percent. Based on data from the Central Statistics Agency (BPS) in 2019, skin diseases were among the 10 biggest diseases in Medan City, with the number of cases reaching 43,042 (8.69 percent). The details include 23,529 cases of allergic skin diseases (4.75 percent) and 19,513 cases of infectious skin diseases (3.94 percent). Medan Belawan District, which is a coastal area in Medan City, also recorded significant figures. Based on data from the Medan Belawan Health Center, skin diseases were among the 10 highest

diseases in 2022-2023, with a total of 1,751 cases, or equivalent to 24 percent. (Malau et al., 2024). Based on information from health workers at the Assistant Health Center (PUSTU) of Bagan Deli Village, the types of skin diseases most often experienced by the local community are bullous impetigo and miliaria (Badan Pusat Statistik, 2019). In a study conducted by (Nasution et al., 2023) in the Belawan area, it can be concluded that the area is still far from healthy. This is due to the slum environment and poor sanitation. Bad habits of the community include the habit of throwing garbage directly into the sea, the small number of people who have toilets with septic tanks. So that the surrounding environment is surrounded by piles of garbage and air pollution caused by piles of wet garbage. This is also related to the high incidence of skin diseases in the area. Poor hygiene and sanitation are still one of the major health problems in developing countries. According to WHO, polluted water, inadequate sanitation, and poor hygiene practices are the leading causes of death and the second largest factor causing skin diseases in these countries. Efforts to improve hygiene and sanitation are the most important steps to improve children's health and are a top priority in health promotion in developing countries (Fattah, 2018)

Skin diseases in coastal communities can be influenced by several factors, including personal hygiene, fungal and bacterial infections, humidity levels, water quality, nutritional status, work such as fishermen or laborers at fish auctions, and a history of previous skin diseases (K et al., 2022). In addition, people who suffer from skin diseases on the coast have the characteristic of having a type of business activity that is predominantly carried out at sea, both fishing at sea, processing fishery products, and fish ponds. Exogenous factors include length of service, history of skin disease, work history, environment and type of work. Endogenous factors include age, gender, use of personal protective equipment and personal hygiene (Irma, 2024)

From the description above, it is suspected that knowledge about skin diseases has a major influence on the high incidence of skin diseases in the Belawan area. Knowledge about everything related to skin diseases, including how they are transmitted, preventive measures to avoid infection, and the symptoms and signs that appear, as well as the factors that cause skin diseases. So in this study, researchers are interested in finding out the effect of knowledge on the high incidence of skin diseases.

## **Method**

This study is a quantitative study with an analytical approach, using a cross-sectional study design, namely research in which data collection is carried out simultaneously or at one time. Data were collected through the distribution of questionnaires by researchers to respondents (Sukmawati et al., 2023). The sample of this study was the coastal community of Belawan with a sample size of 70 samples. This study aims to determine Public Knowledge of the High incidence of skin diseases in the coastal area of Belawan, Medan City, North Sumatra.

## Results

**Table 1. Frequency Distribution of Respondents' Gender**

Gender	Frequency	%
Male	24	34,3%
Woman	46	65,7%
<b>Total</b>	<b>70</b>	<b>100%</b>

Based on the results of data obtained from table 1, out of 70 respondents, 24 people (34.3%) were male and as many as 46 people (65.7%) were female. The information obtained is that the female gender is more dominant than the male gender in this research sample.

**Table 2. Distribution of Respondents' Last Education Frequency**

Last Education	Frequency	%
SD	1	1,5%
JUNIOR	3	4,3%
High School/Vocational School	41	58,6%
College	25	35,6%
<b>Total</b>	<b>70</b>	<b>100%</b>

Based on the results of the data obtained in table 2, the last education at the elementary level was 1 person (1.5%), junior high school education was 3 people (4.3%), high school/vocational education was 41 people (58.6) and higher education was 25 people (35.6%). The information obtained is that the last education at the high school/vocational level is the most compared to other levels of education.

**Table 3. Frequency Distribution Related to Respondents' Knowledge Related to Various Skin Diseases in the Research Area**

Respondents' knowledge related to skin diseases	Frequency	%
Yes, Knowing	40	57,1%
Don't Know	30	42,9%
<b>Total</b>	<b>70</b>	<b>100%</b>

Based on the data obtained from the third table, the respondents who knew about various types of skin diseases in the study area were 40 respondents (57.1%) and those who did not know the types of diseases in the area were 30 people (42.9%). The information obtained was that respondents who knew more about various diseases in the research area than those who did not know.

**Table 4. Distribution of Respondents' Knowledge Frequency Related to the Causes of Skin Diseases**

Respondents' knowledge of skin causes	Frequency	%
Yes, Knowing	61	87,3%
Don't Know	9	12,7%
<b>Total</b>	<b>70</b>	<b>100%</b>

Based on the data obtained from the fourth table, the respondents who knew the causes of skin diseases in the study area were 61 respondents (87.3%) and those who did not know the causes of diseases in the area were 9 people (12.7%). The information obtained was that respondents knew more about the causes of diseases in the research area than those who did not know.

**Table 5. Distribution of Respondents' Knowledge Frequency related to the prevention of skin diseases**

Respondents' knowledge related to skin disease prevention	Frequency	%
Yes, Knowing	43	62%
Don't Know	27	38%
<b>Total</b>	<b>70</b>	<b>100%</b>

Based on the data obtained from the fifth table, the respondents who knew how to prevent skin diseases in the study area were 43 respondents (62%) and those who did not know the cause of the disease in the area were 27 people (38%). The information obtained was that respondents who knew how to prevent skin diseases in the research area were more likely than those who did not.

**Table 6. Frequency Distribution is related to respondents' knowledge of signs of skin diseases**

Respondents' knowledge related to signs of skin diseases	Frequency	%
Yes, Knowing	54	76,8%
Don't Know	16	23,2%
<b>Total</b>	<b>70</b>	<b>100%</b>

Based on the data obtained from the sixth table, the respondents who knew the signs of skin disease in the study area were 54 respondents (76.8%) and those who did not know the signs of disease in the area were 16 people (23.2%). The information obtained was that respondents knew more signs of skin diseases in the research area than those who did not know.

**Table 7. Frequency Distribution is related to easy access to information about skin diseases**

Easy Access to Information on Skin Diseases	Frequency	%
Yes, Easy	34	47,9%
Not Easy	36	52,1%
<b>Total</b>	<b>70</b>	<b>100%</b>

Based on the data obtained from the seventh table, the respondents who have easy access to information related to skin diseases are 34 respondents (47.9%) and those who do not have easy access related to skin diseases are 36 people (52.1%). The information obtained was respondents who had easy access to obtain less skin disease information than those who did not have easy access.

## Discussion

A person's knowledge of an object has different levels for each individual. Knowledge is the result obtained through sensory processes, especially the eyes and ears, either directly or through knowledge from others. Knowledge is the result of knowing, when someone senses an object. The five human senses are the senses of sight, hearing, smell, and taste. Most of human knowledge is obtained from the senses of sight and hearing, namely the process of seeing and listening. A person's level of knowledge can be influenced by several factors such as age, education, occupation and sources of information (Nola & Amelia, 2022). From the results of the questionnaire study obtained, Belawan residents almost had sufficient knowledge regarding skin diseases. This is concluded from the percentage results which have exceeded 50%. This is in line with previous research conducted by (Prawati et al., 2022) which was carried out in Bagan Deli, one part of Belawan. Where the results of this study stated that knowledge about skin diseases among Bagan Deli residents was quite good, only

there were still some residents who still did not understand this skin disease. And where in Bagan Deli sub-district, this skin disease is often found in residents who work as fishermen aged 41-50 years with a work environment of 5-10 hours.

Not only general knowledge, but knowledge related to the prevention of skin diseases also needs to be understood. Education as a solution to prevent scabies is closely related to the level of knowledge. Knowledge about prevention, how the disease is transmitted, and treatment efforts if infected with a skin disease has an impact on healthy living behavior that maintains personal and environmental hygiene, which is then expected to be able to suppress or even eliminate the prevalence of skin diseases. The behavioral domain is essentially proactive behavior in maintaining and improving health, preventing the risk of disease and protecting oneself from the threat of disease and actively participating in health efforts (Charmel D et al., 2024). This study is in line with (Khikmah et al., n.d.) where he concluded that the higher a person's education, the more insight they will have so that the results of this study show that some residents who suffer from skin diseases are residents who have a low level of education and pay less attention to the importance of maintaining personal hygiene.

Amidst the rapid development of information technology, easy access to information has become one of the key factors in increasing public knowledge about various aspects of health, including skin diseases. In this context, it is important to understand how good access to information can contribute to increasing knowledge, reducing the incidence of skin diseases. Easy access to information has a major impact on public knowledge about skin diseases. By utilizing technology and effective health education, we can improve individual understanding of the prevention and management of skin diseases. Therefore, it is important for all parties including the government, health institutions, and communities to continue to strive to provide accurate and easily accessible information for the sake of mutual health. A more educated society will be better able to maintain their skin health and reduce the prevalence of skin diseases in their environment (Nurmala, 2020).

## **Conclusion**

The results of the study showed that Belawan residents have sufficient knowledge about skin diseases, with more than 50% of respondents understanding the condition. However, there are still some who do not understand, especially among residents who work as fishermen aged 41-50 years. This is influenced by several factors, one of which is the level of education. Based on the results of previous studies, it was concluded that the lower a person's knowledge, the less he or she pays attention to personal hygiene. In addition, knowledge and access to information also affect the incidence of skin diseases. Research shows that the higher a person's education, the better their understanding of the importance of maintaining personal hygiene.

Analysis related to the description of knowledge regarding the high incidence of skin diseases produces an implication that may be appropriate if applied. The implication that can be applied is to hold community-based training and education programs about skin health involving schools, workplaces, and local organizations. The low level of public knowledge about the prevention and treatment of skin diseases can contribute to the high incidence of these diseases. Effective education, such as through health campaigns, seminars, or social media, is an important step to increase awareness.

In this digital era, the spread of knowledge is not only through counseling or directly face to face. We can spread knowledge through social media that allows everyone to easily access the knowledge. For example, by using media such as posters, videos, and infographics that are easy to understand to convey information about the prevention and treatment of skin diseases.

This implication certainly will not run effectively without collaboration. Therefore, collaboration between the government, health institutions, and communities is needed to provide accurate and easily accessible information. A more educated society will be better able to maintain their skin health and reduce the prevalence of skin diseases in their environment.

## References

- [1] Charmel D, Y., Gregorius E. A, A., & Leddy R, N. (2024). *HUBUNGAN ANTARA PENGETAHUAN SIKAP DAN PERILAKU PENCEGAHAN PENYAKIT PADA PENDERITA SKABIES DI KAMPUNG IWAKA DISTRIK IWAKA KABUPATEN MIMIKA | Jurnal Kesehatan Tambusai*. <https://journal.universitaspahlawan.ac.id/index.php/jkt/article/view/32834>
- [2] Dhermawan, H. S., Yutami, N., & Santi, E. N. (2021). *View of Kebersihan Tempat Tidur Dan Sprei Sebagai Faktor Risiko Keluhan Penyakit Kulit Di Wilayah Pesisir, Kampung Bugis, Kota Tanjungpinang Tahun 2018*. <https://e-journal.poltekkesjogja.ac.id/index.php/JTK/article/view/888/709>
- [3] Fattah, N. (2018). Hubungan Personal Hygiene dan Sanitasi Lingkungan dengan Kejadian Penyakit Kulit pada Pasien di Puskesmas Tabaringan Makassar. *UMI Medical Journal*, 3(1), Article 1. <https://doi.org/10.33096/umj.v3i1.33>
- [4] Harlim, A. (2019). *BUKU AJAR ILMU KESEHATAN KULIT DAN KELAMIN FK UKI. FK UKI*. <http://repository.uki.ac.id/1309/>
- [5] Irma. (2024). Faktor Individu dan Riwayat Penyakit Kulit Sebagai Prediktor Dermatitis Kontak pada Nelayan: Individual Factors and History of Skin Disease as Predictors of Contact Dermatitis in Fishermen. *Indonesian Scholar Journal of Medical and Health Science*, 3(05), Article 05.
- [6] K, D. R., Hidajat, D., & A.a.a, N. W. (2022). *Pengenalan dan Edukasi Deteksi Dini Penyakit Kulit di Daerah Pesisir Pantai Ampenan, Lombok NTB | Jurnal Gema Ngabdi*. <https://gemangabdi.unram.ac.id/index.php/gemangabdi/article/view/232>
- [7] Kemenkes. (2015). *PROFIL KESEHATAN INDONESIA TAHUN 2014*. <https://adoc.pub/ind-p-profil-kesehatan-indonesia-tahun-2014.html>
- [8] Kemenkes. (2016). *Repository—Aplikasi Repository Kementerian Kesehatan Republik Indonesia*. <https://repository.kemkes.go.id/book/1207>
- [9] Khikmah, K., Muthoharoh, A., Wulan N, A., & Rahmatullah. (n.d.). *Hubungan Tingkat Pengetahuan Dan Kepatuhan Terhadap Waktu Kesembuhan Penyakit Scabies Pada Santri Di Yayasan Islam Al-Sya'iriyah*.
- [10] Malau, P. M., Naria, E., & Indirawati, S. M. (2024). *Sanitation Risk Analysis and Incidence of Skin Diseases in Medan Belawan District Medan City | Jurnal kesehatan komunitas (Journal of community health)*. <https://jurnal.htp.ac.id/index.php/keskom/article/view/2005>
- [11] Nasution, A. F., Asnawi, A. A., Saragih, A. M., Erwina, B. P., & Gurning, F. P. (2023). Analisis Perilaku Hidup Bersih dan Sehat (PHBS) Masyarakat Pesisir Kelurahan Bagan Deli Kecamatan Medan Belawan. *Jurnal Ilmiah Universitas Batanghari Jambi*, 23(2), Article 2. <https://doi.org/10.33087/jiubj.v23i2.3044>
- [12] Nola, S., & Amelia, P. K. (2022). GAMBARAN TINGKAT PENGETAHUAN MAHASISWA TENTANG PENYAKIT SKABIES DI ASRAMA PUTRA UNIVERSITAS ISLAM NEGERI Ar-RANIRY BANDA ACEH. *Jurnal Ilmu Kedokteran dan Kesehatan*, 9(2). <https://doi.org/10.33024/jikk.v9i2.5452>
- [13] Prawati, S. A., Hasanah, A., A, D. A., Azhari, M., Rizki, P. A., & Siagian, Y. H. (2022). GAMBARAN PENGETAHUAN TENTANG PENYAKIT DERMATITIS KONTAK

- AKIBAT KERJA DI KELURAHAN BAGAN DELI. *PREPOTIF: JURNAL KESEHATAN MASYARAKAT*, 6(2), 1266–1274. <https://doi.org/10.31004/prepotif.v6i2.4389>
- [14] Sukmawati, A. suci, Rusmayadi, G., Amalia, M. M., Hikmah, H., Rumata, N. A., P, M. A. C., Abdullah, A., Sari, A., Hulu, D., Wikaningtyas, R., Munizu, M., & Sa'dianoor, S. (2023). *METODE PENELITIAN KUANTITATIF: Teori dan Penerapan Praktis Analisis Data berbasis Studi Kasus*. PT. Sonpedia Publishing Indonesia.
- [15] Harlim, A. (2019). *BUKU AJAR ILMU KESEHATAN KULIT DAN KELAMIN FK UKI*. FK UKI. <http://repository.uki.ac.id/1309/>
- [16] Badan Pusat Statistik. (2019). *Kota Medan Dalam Angka 2019—Badan Pusat Statistik Kota Medan*. <https://medankota.bps.go.id/id/publication/2019/08/16/9232053a310c2b5c642e1b3b/kota-medan-dalam-angka-2019.html>
- [17] Nurmala, I., S. KM., MPH. (2020). *Promosi Kesehatan*. Airlangga University Press.