

Relationship Level Of Education And Knowledge With The Incidence Of Dermatitis In The Community At Puskesmas Patek, Aceh Jaya District

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ABSTRACT

Skin disease is the most workers' disease after bone and muscle disease. Occupational contact dermatitis ranks first in occupational skin diseases, 80% are irritant contact dermatitis and the remaining 20% are allergic contact dermatitis. In general, this study aims to see whether there is a relationship between the level of education and knowledge with the incidence of contact dermatitis in the community in the working area of the Patek Public Health Center, Aceh Jaya district, with a total population of 198 people. This study used a quantitative research type with a cross sectional approach. The population in this study was 198 people with a sample of 67 people using a purposive sampling technique in taking the sample. Statistical analysis using chi-square test. The results showed that 24 (35.8%) respondents had junior high school education, 33 (49.3%) had high school education, and 10 (14.9%) undergraduate education. Based on the statistical test with the chi-square test, it was obtained that the p value = 0.455 (> 0.05) then H_a is accepted, which means that there is no relationship between education and the incidence of dermatitis. While the 25 respondents who had high knowledge there were 11 people (16.4%) who had allergic contact dermatitis and 14 people (20.9%) who had irritant contact dermatitis. While the 42 respondents who had low knowledge, there were 14 people (20.9%) who had allergic contact dermatitis and 28 people (41.8%) who had irritant contact dermatitis. Based on statistical tests with the chi-square test, it was obtained that p value = 0.383 (> 0.05) so H_a was accepted, which means that there is no relationship between education and the incidence of dermatitis.

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1. INTRODUCTION

Occupational disease that often occurs is contact dermatitis. Contact dermatitis is dermatitis caused by materials or substances that stick to the skin [1]. Dermatitis is a skin disease that generally occurs repeatedly in a person in the form of inflammation of the skin (epidemic and dermis) in response to the influence of exogenous factors, including age, gender, anatomical condition of the skin, history of eczema and or endogenous factors, which are predisposing factors. strengthening, which is a clinical disorder in the form of polymorphic license and complaints of itching due to work [2].

One of the efforts to achieve public health status is to control all disease occurrences, including dermatitis. Dermatitis is a group of diseases that is often taken lightly, even though it is included in the top 10 diseases that affect Indonesian people [3].

Occupational contact dermatitis (DKAK) is a disease of contact dermatitis acquired from work, due to interactions between the skin and substances used in the work environment. These substances irritate the skin, damage it and stimulate an inflammatory reaction, so skin irritation is the most common cause of contact dermatitis [4].

Allergic contact dermatitis is an inflammatory reaction that occurs in someone who has experienced sensitization to an allergen. Irritant contact dermatitis is contact dermatitis caused by

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irritant substances that can cause tissue damage and cause clinical abnormalities in the form of polyformic efflorescence (edema, erythema, vesicles, scales, lichenification) and complaints of itching [5].

Contact dermatitis can cause the following complications: chronic itching, scaly skin. A skin condition called neurodermatitis begins with the appearance of itchy skin patches. When scratched, the area will feel more itchy. Because it itches so much, people will keep on scratching. Eventually, scratching will become a habit. This condition can make the affected skin discolored, thick and rough. Infection if you repeatedly scratch the rash, the rash will become wet and ooze. This can trigger bacteria or fungus to grow and can cause an infection[6].

The impact caused by dermatitis depends on the patient's immunity, therefore the impact of the reaction of one person is different from another person even though the cause is the same. But if someone has severe dermatitis, blisters will form on the skin and are very dangerous for the skin[7].

One of the factors causing contact dermatitis is the lack of knowledge about the disease caused by people's ignorance of the occurrence of contact dermatitis. Good community attitudes can be seen in the attitude of the community who are enthusiastic and concerned about the occurrence of contact dermatitis, so they behave more carefully to check their health and be aware of the occurrence of contact dermatitis in the family, taking into account the occurrence of contact dermatitis in the family, this is also caused by changes in self people themselves as a result of observing, receiving, caring for, and implementing what they learn through health service counseling [4].

Contact dermatitis is generally caused by external substances that cause inflammation such as chemicals contained in tools that are used daily such as accessories, cosmetics, topical medicines, metals and clothing, detergents and materials related to work. such as cement, laundry soap, pesticides, paints, and other chemical-containing materials [8].

The World Health Organization (WHO) reports that in 2020 the prevalence of irritant contact dermatitis ranks 4th, which is 10%. Based on an annual survey on occupational diseases in the working population, 80% of them are irritant contact dermatitis. The worldwide prevalence is reported to be around 300 million cases annually [4].

Based on Basic Health Research by the 2017 Ministry of Health, the national prevalence of dermatitis is 6.8% (based on respondent complaints). A total of 13 provinces have a prevalence of dermatitis above the national prevalence, namely, Gorontalo, Central Sulawesi, North Sulawesi, South Kalimantan, Central Kalimantan, East Nusa Tenggara, DI Yogyakarta, Central Java, West Java, Jakarta, Bangka Belitung, West Sumatra and including Nanggroe Aceh Darussalam[6].

Based on the description above, researchers are interested in seeing whether or not there is a relationship between education level and knowledge with the incidence of dermatitis in the working area of the Patek Health Center, Darul Hikmah District, Aceh Jaya Regency.

2. METHOD

This research is a research using analytic methods with a cross-sectional research design, where data collection is done only once using primary data. The independent variables in this study were the level of education and knowledge, while the dependent variable was the incidence of contact dermatitis. The population in this study is the community in the working area of the patek health center, Aceh Jaya Regency with a population of 198 people. The sampling technique is purposive sampling. In taking the sample the author uses the slovin formula.

The type of instrument used in this research is a questionnaire. The questionnaire in this study was used to see whether there was a relationship between level of education and knowledge with the incidence of contact dermatitis in the working area of the Patek Health Center, Aceh Jaya District. This questionnaire consists of 30 questions, correct answers are given a value of 1 and wrong answers are given a value of 0.

Place and Time of Research

This research was conducted in the working area of the Patek Health Center, Darul Hikmah District, Aceh Besar District. This research was conducted from April to May 2022.

3. RESULTS AND DISCUSSION

Result

General Characteristics of Respondents

Table 1. Frequency Distribution of Respondent Characteristics

Characteristics	F	%
Gender		
male	30	45
Female	37	55
TOTAL	67	100
Age		
Late Teens	20	30
Early Adult	17	25
Late Adult	14	21
Early Seniors	13	19
Late Seniors	3	5
TOTAL	67	100
Education		
Middle School	24	36
High School	33	49
Graduate	10	15
TOTAL	67	100
Knowledge		
Height	25	37
Low	42	68
TOTAL	67	100
Marital Status		
Marry	51	76
Singel	16	24
TOTAL	67	100

Based on table 1 it can be seen that in the characteristics of the respondents' gender the majority of respondents were female, namely as many as 37 people (55%), in the characteristics of the respondents the majority of respondents were aged <25 years, namely 20 people (30%), in education the majority had high school education, namely 33 people (49%), the knowledge of the majority of respondents had low knowledge, namely as many as 42 people (68%) and the majority were married, namely as many as 51 people (76%).

Description of Research Variables.

a. The Relationship between Education Level and the Incidence of Dermatitis.

Table 2. Relationship between education level and the incidence of dermatitis

No	Education	Dermatitis				Total		P Value
		ACD		ICD		n	%	
		n	%	n	%			
1	Junior High School	10	14.9	14	20.9	24	35,8	0.455
2	Senior High School	10	14.9	23	34.3	33	49,3	
3	Graduate	5	7.5	5	7.5	10	14.9	
	Total	25	37.3	42	62.7	67	100	

Based on table 2, it is known that of the 24 respondents with junior high school education, there were 10 people (14.9%) who had allergic contact dermatitis and 14 people (20.9%) who had irritant contact dermatitis. Furthermore, from 33 respondents with high school education, there were 10 people (14.9%) who had allergic contact dermatitis and 23 people (34.3%) who had irritant contact dermatitis. Meanwhile, out of 10 respondents with undergraduate education, there were 5 people (7.5%) who had allergic contact dermatitis and 5 people (7.5%) who had irritant contact dermatitis. The results of the statistical test using the chi-square test showed that 24 (35.8%) respondents had junior high school education, 33 (49.3%) had high school education, and 10 (14.9%) undergraduate education. -square obtained p value = 0.455 (> 0.05) then H_a is accepted, which means that there is no relationship between education and dermatitis.

b. Relationship Level of Knowledge with the Incidence of Dermatitis.
The relationship between the level of knowledge and the incidence of dermatitis.

Table 3. The relationship between the level of knowledge and the incidence of dermatitis

No	Knowledge	Dermatitis				Total		P Value
		ACD		ICD		n	%	
		n	%	n	%			
1	Tall	11	16.4	14	20.9	25	37.3	0.383
2	Low	14	20.9	28	41.8	42	62.7	
	Total	25	37.3	42	62.7	67	100	

Based on table 3 the results of the study from 25 respondents who had high knowledge there were 11 people (16.4%) who had allergic contact dermatitis and 14 people (20.9%) who had irritant contact dermatitis. Meanwhile, 42 respondents who had low knowledge there were 14 people (20.9%)) who had allergic contact dermatitis and 28 people (41.8%) who had irritant contact dermatitis. The results of the chi-square statistical test obtained a p value = 0.383.

Discussion

The Relationship between Education Level and the Incidence of Contact Dermatitis in the Community at the Patek Health Center, Aceh Jaya District.

In this study, the p-value obtained was ($0.455 > 0.05$), meaning that there was no relationship between education level and the incidence of contact dermatitis.

This study is the same as previous research regarding the relationship between education and the incidence of contact dermatitis where there is no relationship between education and the incidence of dermatitis with a p-value = ($0.557 > 0.05$), meaning that H_0 is accepted [9]. This research is also supported by previous studies where statistical tests also showed a value of $p = 0.654$ or $p > \alpha, 0.05$ so that it can be concluded that there is no relationship between education and the incidence of dermatitis. [3]. This research is also supported by previous research where the statistical test showed a p value = ($0.10 > 0.05$), which means that there is no relationship between education level and the incidence of work-related contact dermatitis in DLHK Denpasar City waste collectors. [10].

Education is a process of learning and teaching based on what is expected by the community. Education has a relationship with the pattern of development and changes in one's behavior. Education is also related to changes in knowledge, attitudes, beliefs, skills, and all aspects of people's behavior for the better [11].

Education is a determining factor for the level of individual knowledge because the level of education and knowledge is directly related. Those with a high level of education are certainly easy to receive information, so there is still a lot of knowledge that must be possessed and handled before becoming good or bad behavior, which will ultimately affect their health, or the higher the level of

education, the higher the individual's capability in maintaining health in order to avoid various disease [12].

Education is a determining factor for the level of individual knowledge because the level of education and knowledge is directly related. Those with a high level of education are certainly easy to receive information, so there is still a lot of knowledge that must be owned and handled before becoming good or bad behavior, which will ultimately affect their health, or the higher the level of education, the higher the individual's capability in maintaining health in order to avoid various disease [12].

Health education activity is the provision of health information or messages in the form of health education to provide or increase one's knowledge and attitudes about health through learning techniques or practice instructions with the aim of changing or influencing human behavior both individually, in groups and in society. Become more independent thereby facilitating healthy behavior [13].

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In this study, the p-value obtained was $(0.383 > 0.05)$, meaning that there was no relationship between the level of knowledge and the incidence of contact dermatitis.

This study is in line with previous research where knowledge has no correlation with the incidence of contact dermatitis, the p-value obtained $(0.27 > 0.05)$ [14]. This research is also supported by previous studies where statistical tests showed the P-Value was 0.244. Because the P-Value $(0.244) > \alpha (0.05)$, the decision is not to reject H_0 . This means that there is no relationship between the level of knowledge on the prevention of seborrheic dermatitis in students at SMA Negeri Unggul Sigli [15]. This research is also supported by previous studies, the results of the Chi Square test analysis obtained a P-value of $0.224 \geq \alpha 0.05$, so it can be said that H_0 is accepted, meaning that there is no relationship between public knowledge and complaints of dermatitis [16].

Acquisition of knowledge does not necessarily result in changed behavior. Before or expected to carry out health actions, knowledge about health is very important. However, the desired health action may not occur until a person receives a signal that is strong enough to induce it. The incidence of contact dermatitis should be reduced if the community has adequate information, but in this study several factors such as knowledge but daily actions at work, not using this knowledge properly prevented this from happening. As a result, they have a bad habit of not wearing personal protective equipment, so they often cause complaints of itchy skin, redness and itching when the skin sweats [4].

4. CONCLUSION

The results showed that the statistical test using the chi-square test obtained a p value = 0.455 (> 0.05) which means that there was no relationship between education and the incidence of dermatitis and based on statistical tests using the chi-square test obtained a p value = 0.383 (> 0.05) means that there is no relationship between education and the incidence of dermatitis.

REFERENCES

- [1] E. Yurandi, Entianopa, and MeldaYenni, "Faktor yang Berhubungan dengan Kejadian Dermatitis Kontak pada Petugas Pengangkut Sampah di TPA Talang Gulo," *Indones. J. Heal. Community*, vol. 2, no. 1, p. 1, 2021, doi: 10.31331/ijheco.v2i1.1613.
- [2] R. A. Sirait and Z. A. P. Samura, "Penyuluhan Kesehatan Tentang Penggunaan Alat Pelindung Diri Untuk Mencegah Penyakit Dermatitis Pada Nelayan," *J. Pengmas Kestra*, vol. 1, no. 1, pp. 53–59, 2021, doi: 10.35451/jpk.v1i1.720.
- [3] N. Gafur, Abd dan Syam, "Determinan Kejadian Dermatitis di Puskesmas Rappokalling Kota Makassar," *Wind. Heal.*, vol. 1, no. 1, pp. 21–28, 2018, [Online]. Available: <http://jurnal.fkmumi.ac.id/index.php/woh/article/view/woh1105%0A>.
- [4] I. Hayati and R. R. Lestari, "Hubungan Pengetahuan Masyarakat Tentang Dermatitis Kontak Dengan Kejadian Dermatitis Kontak Di Desa Pantai Raja Wilayah Kerja Puskesmas Perhentian Raja," *J. Kesehat. Terpadu*, vol. 1, no. 4, pp. 11–17, 2022.

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- [5] S. Pradananingrum, D. Lestantyo, and S. Jayanti, "Hubungan Personal Hygiene, Lama Kontak, Dan Masa Kerja Dengan Gejala Dermatitis Kontak Iritan Pada Pengrajin Tahu Mrican Semarang," *J. Kesehat. Masy.*, vol. 6, no. 4, pp. 378–386, 2018.
- [6] Y. Ansela, Sugiarto, and C. Wuni, "Faktor-faktor yang berhubungan dengan upaya pencegahan dermatitis kontak iritan pada pekerja cucian motor," *J. Healthc. Technol. Med.*, vol. 6, no. 1, pp. 459–467, 2020.
- [7] S. Fathina Izzati, "Pengaruh Intervensi Permainan Ular Tangga Terhadap Pengetahuan Dan Sikap Smartphone Pada Siswa Kelas VII SMP Islam Al-Azhar Cairo Kota Palembang," 2020.
- [8] C. T. Jimaha, V. Madonna Lumban Toruanb, and H. Nugrohoc, "Karakteristik Dan Manajemen Dermatitis Kontak Di Pelayanan," *J. Kedokt.*, vol. 7, no. 2, 2020.
- [9] A. Wahyu, A. U. Salamah, A. R. Fauziah, M. A. Angaradipta, and S. S. Russeng, "Faktor Dominan Yang Mempengaruhi Kejadian Dermatitis Kontak Dan Dampaknya Terhadap Kualitas Hidup Pada Petani Rumput Laut Di Dusun Puntondo Takalar," *J. Kesehat. Masy. Marit.*, vol. 1, no. 1, 2019, doi: 10.30597/jkmm.v1i1.8703.
- [10] I. G. S. A. Pramana and N. W. A. Utami, "Hubungan Higiene Perorangan Dan Penggunaan Alat Pelindung Diri Dengan Ksejadian Dermatitis Kontak Akibat Kerja Pada Pekerja Pengangkut Sampah Di Dlhk Kota Denpasar Tahun 2020," *Arch. Community Heal.*, vol. 8, no. 2, p. 325, 2021, doi: 10.24843/ach.2021.v08.i02.p09.
- [11] Ernyasih, J. PermataSari, M. Fauziah, Andriyani, N. Lusida, and D. Herdiansyah, "Hubungan Personal Hygiene dengan Kejadian Penyakit Dermatitis di Wilayah Kerja Puskesmas Poris Gaga Lama Tahun 2021," *J. Kedokt. Dan Kesehat.*, vol. 18, no. 1, pp. 25–32, 2021.
- [12] M. Sholeha, R. E. Sari, and F. Hidayati, "Faktor-Faktor yang Berhubungan dengan Gejala Dermatitis Kontak Pada Pemulung di TPA Talang Gulo Kota Jambi," *e-Sehad*, vol. 2, no. 2, pp. 82–93, 2021.
- [13] A. I. Parinduri and A. F. Siregar, "Intervensi Pendidikan Kesehatan tentang Dermatitis Kontak terhadap Peningkatan Pengetahuan pada Pekerja Pencuci Mobil," *J. Ris. Hesti Medan Akper Kesdam I/BB Medan*, vol. 5, no. 2, p. 116, 2020, doi: 10.34008/jurhesti.v5i2.198.
- [14] R. R. Dewi, L. Tina, and W. O. S. Nurzalmariah, "Hubungan Personal Hygiene, Pengetahuan dan Pemakaian Sarung Tangan Dengan Kejadian Penyakit Dermatitis Kontak Pada Pemulung Sampah di TPA Puuwatu Kota Kendari Tahun 2016," *J. Ilm. Kesehat. Masy.*, vol. 2, no. 6, pp. 1–9, 2017.
- [15] S. Nola and T. T. Nadhillah, "Hubungan Tingkat Pengetahuan Terhadap Pencegahan Dermatitis Seboroik pada Pelajar di SMA Negeri Unggul Sigli," *J. Sains Ris.* |, vol. 11, no. November, p. 733, 2021.
- [16] S. W. Asyahri, "Hubungan Pengetahuan Dan Lama Pajanan Air Sungai Dengan Keluhan Dermatitis Tahun 2021 (Studi Pada Masyarakat RT 08 Kelurahan Selat ...," vol. 2021, 2022.