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Behavioral Model of Prevention Occupational Contact Dermatitis in Pesticide Spray Farmers in Gowa Regency

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Abstract

Occupational contact dermatitis is one of the most common skin disorders. Farmers have the highest incidence of occupational contact dermatitis. One population at risk of experiencing long-term negative impacts from agricultural activities that are very close to pesticides are spray farmers. This study aims to find a model of occupational contact dermatitis prevention behavior in pesticide spraying farmers in Gowa Regency based on the theory of the Health Belief Model and Theory Planned Behavior.This type of research is analytic observational with cross section design. This study used stratified random sampling, namely 97 farmers who sprayed pesticides. Data were collected using a questionnaire then analyzed using PLS (partial least square).The proposed model is obtained with a significant pathway between modifying factors into behavioral beliefs, normative beliefs and control beliefs (self and environment); behavioral beliefs to intention (intention) and behavior (practice); normative beliefs to intention; control beliefs (self) to intention; and control beliefs (environment) to intention and behavior (practice). There are five insignificant pathways, namely between the modifying factor pathway to intentions and behavior (practice), the normative beliefs pathway to behavior (practice), the control beliefs (self) pathways to behavior (practice) and the intention pathway to behavior (practice).Improvement of occupational contact dermatitis prevention behavior can be done by paying attention to behavioral beliefs (attitudes), namely by wearing closed clothing (long-sleeved shirts and long pants), control beliefs (environmental) factors, namely by paying attention to wind direction.

Keywords:*preventive behavior, occupational contact dermatitis, pesticide spraying farmers*

1. Introduction

Occupational contact dermatitis is one of the most common skin disorders (Tombeng et al., 2012).Occupational contact dermatitis can be classified into two, namely allergic contact dermatitis and irritant contact dermatitis (Ministry of Health, 2009). Irritants are the most common etiology of contact dermatitis although the clinical symptoms of the two are similar to each other (Gawkrodger& Arden-Jones, 2(illegible)). Itching is a common symptom in allergic contact dermatitis, while a symptom of burning and pain in irritant contact dermatitis. In general, occupational contact dermatitis in farmers takes place at hand (Tombeng et al., 2012).

Agricultural workers, especially farmers, are exposed to chemicals that are often used in agriculture as well as other factors such as humidity, temperature, and frequency of washing hands which can affect the prevalence of Occupational contact dermatitisMarks et al (2002) Occupational contact dermatitis is dermatitis that occurs due to contact with materials in the work environment and will not occur if the sufferer does not do the work (Gawkrodger& Arden-Jones, 2013; Retnoningsih, 2017; Rycroft et al., 2001). Work must be the main and important factor for the cause (Rycroft& Frosch, 2011).

Farmers are the largest working group in Indonesia to improve optimal agricultural yields, farmers apply various technologies, including the use of chemicals(Octiara, 2018). Farmers have the highest incidence of occupational contact dermatitis (Tombeng et al., 2012). Agricultural workers perform a variety of jobs exposed to chemicals, biology, and other hazardous substances(Marks et al., 2002).One of the population at risk of experiencing long-term negative impacts from agricultural activities that are very close to pesticides is spray farmers (Bretveld et al., 2006; Susilowati et al., 2017). Pesticides are one of the chemicals that cause occupational contact dermatitis (Tombeng et al., 2012;Rycroft, & Frosch, 2011). Farmers do not are aware that the pesticides they use can enter their bodies through dermal, inhalation, and digestion (Rycroft& Frosch, 2011; Yuantari et al., 2015). Skin exposure is often the main route by which acute and severe toxic effects are caused, primarily by the skin absorption of cholinesterase-inhibiting insecticides (organophosphorus compounds) (Rycroft et al., 2001).

The 2008 Indonesian Health Profile shows that the distribution of outpatients according to the International Classification of Diseases - X (ICD-X) in hospitals in Indonesia in 2008 with categories for diseases caused by skin diseases and subcutaneous tissue was 115,100 total visits with 64,557 new cases (Ministry of Health, 2009). Data epidemiology in Indonesia shows that 97% of the 389 cases of skin disease are contact dermatitis, 66.3% of these cases are irritant contact dermatitis and 33.7% are allergic contact dermatitis. The incidence of occupational skin diseases in Indonesia, which is a contact dermatitis, is 92.5%, the remaining 5.4% are caused by skin infections and 2.1% are caused by other skin diseases (Perdoski, 2009). In the state of California, the highest skin disorders are in the agricultural sector(Marks et al., 2002).About 30% of occupational diseases in farmers are contact dermatitis. In 2011 skin disease and subcutaneous tissue became the third rank of the 10 most common diseases among outpatients in hospitals in Indonesia, namely 192,414 visits with 8,576 new cases(Ministry of Health, 2012).

The Data and Information Center of the Ministry of Health of the Republic of Indonesia shows that the percentage of the population aged 15 years and over who works and has health complaints according to business fields, work status and working hours in 2016 is the highest occupied by the agricultural sector, namely 29.27% (MinistryofHealth, 2018). Data obtained from managers occupational health, reports of outpatient PuskesmasTinggimoncong District in 2019 with a diagnosis of dermatitis ranked second in the list of the top 10 most diseases in farmers. This shows that skin disease is growing and is still very dominant in Indonesia.

In most parts of the world, adequate conditions to protect pesticide workers are not available. Reasons for inadequate protection are often lack of resources, and a low level of awareness of the risks from skin exposure. It is also inconvenient to use fully insulating equipment in hot and humid climates. In the poorest developing countries, where many of the most dangerous pesticides are used, workers may have no protection at all. Spraying farmers can do blending and spraying wearing only a T-shirt and shorts. Adequate washing of skin, clothing and utensils is often absent. Employment as a farmer cannot be separated from the use of pesticides in controlling pest populations. Where there is a tendency for farmers to use pesticides continuously with high frequency, they often pay less attention to the rules of its use. The skin's exposure to pesticides depends largely on how the work is done, and on awareness of the risks caused by skin contamination. The most appropriate equipment for protection against exposure to hazardous pesticides depends on the type of work and the properties of the pesticide product. For protection, it is important that equipment is used properly, clean and in good condition (Rycroft et al., 2001).

Research conducted by Putri (2019) there is a significant relationship between the level of knowledge related to pesticides and the use of personal protective equipment against occupational contact dermatitis. Research conducted by Rahmatika(2019) as many as 13.5% of farmers in PunduhPedada District experienced contact dermatitis. The results of this study indicate that there is a relationship between contact dermatitis and the use of personal protective equipment, length of work, personal hygiene, the number of types of pesticides, and the number of types of fertilizers.

The use of PPE is one way for farmers to avoid potential dangers such as dermatitis. The use of PPE with the use of coveralls, aprons, raincoats, gloves, hats, boots, masks and goggles or face shields

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(Rycroft et al., 2001)Gloves can prevent occupational contact dermatitis. There are some special requirements in the manufacture of gloves that can protect workers from occupational contact dermatitis. Apart from gloves, protective creams create a layer between the skin and allergens / irritants. However, the survey results said that 98% believed the protective cream was no more effective than emollients in the prevention of hand dermatitis. Emollients can be used before or after the sufferer has done work. Emollients are used to prevent irritant contact dermatitis, which acts in the formation of a protective layer on the skin (Brown, 2004).

This study uses two theories in overcoming the incidence of occupational contact dermatitis in pesticide spraying farmers in Gowa Regency, namely the theory of Health Believe Models (HBM) and combined with the theory of behavior, namely Theory Planned Behavior (TPB). HBM is one of the oldest behavioral sciences and has been used for 50 years in the resolution of health problems, particularly disease prevention. This comprehensive model highlights the relationship between beliefs and behaviors and argues that preventive behavior is formed based on a person's personal beliefs about disease (Moshkietal., 2017). This is in line with TPB's behavior theory that the behavior displayed by individuals arises because of intense or intention in the individual to do something. changes in health(Armitage, 2005).

Modifying factors such as age, gender, knowledge in HBM theory can influence intentions which are influenced by attitudes, beliefs and self-control as well as the environment which is expected to change the behavior of pesticide spraying farmers at work to avoid the incidence of occupational contact dermatitis. Based on the above background, it is necessary to prevent occupational contact dermatitis on pesticide spraying farmers in Gowa Regency. So the authors wish to conduct research on Behavior Models of Occupational Contact Dermatitis Prevention on Pesticide Spraying Farmers in Gowa Regency based on the theory of Health Belief Models and Theory Planned Behavior.

2. Methods

The research used in this study was an observational analytic study with a cross sectional design with the aim of finding a behavioral model for occupational contact dermatitis prevention in pesticide spraying farmers in Gowa Regency.

The population in this study were all 850 pesticide spraying farmers in Pattapang Village, Tinggimoncong District, Gowa Regency. The sample used was 97 people and was taken by stratified random sampling. Data collection techniques used in this study, namely through observation (observation), questionnaires (questionnaire), and documentation. The data analysis design used in this study wasdescriptive and multivariate analysis with structural equation modeling (SEM) testing using the SmartPLS application.

3. Results and Discussion

The results of this study provide information about the behavioral model of occupational contact dermatitis prevention in pesticide spraying farmers in Gowa Regency. The population of pesticide spraying farmers in Pattapang Subdistrict, Tinggimoncong District, Gowa Regency is 850 people with a total sample size of 97 pesticide spraying farmers. The following is a table of the results of the analysis through the univariate test based on the characteristics of the respondents and the variables studied as follows:

Table 1. Results of Univariate Test Analysis Based on Respondent Characteristics and Variables Researched on Pesticide Spraying Farmers in Gowa Regency in 2020

Characteristics of Respondents and Variables	Frequency	Percentage (%)
Age (Years)		
≥ 35	47	48.5
< 35	50	51.5
Gender		

Male	95	97.9
Female	2	2.1
Occupational Contact Dermatitis		
Yes	62	64.6
No	34	35.4
Income		
≥ IDR. 1.975.555	51	52.6
<IDR. 1.975.555	46	47.4
Education		
High	50	51.5
Low	47	48.5
Knowledge		
Good	27	27.8
Less	70	72.2
Behavioral Beliefs (attitude)		
positive	61	62.9
negative	36	37.1
Normative Beliefs (Encouragement)		
positive	55	56.7
negative	42	43.3
Control Beliefs (Self)		
positive	56	57.7
negative	41	42.3
Control Beliefs (Environment)		
positive	73	75.3
negative	24	24.7
Intention		
positive	67	69.1
negative	30	30.9
Behavior (Practice)		
Good	67	69.1
Less	30	30.9

Based on Table 1 above, it shows that of the 97 respondents of pesticide spraying farmers, the most respondents were <35 years old, namely 50 (51.5%), and the least respondents were 35 years old, namely 47 (48.5%). Then the characteristics based on gender showed that the most men were as many as 95 (97.9%) and the rest were women as many as 2 (2.1%). Characteristics of respondents based on history or experiencing contact dermatitis due to work, most dentists felt that they had experienced it, namely 62 (64.6%) and a small proportion had never experienced it, namely as many as 34 (35.4%). While the characteristics of respondents based on income indicate that most of the dentist's monthly income was .IDR1. 1,975,555, - namely as many 51 pesticide spraying farmers (52.6%) while the rest was <IDR. 1,975,555, - which was 46 (47, 4%). The characteristics of respondents based on education indicate that most of the pesticide spraying farmers have high education, namely 50 (51.5%) and those with low

education are 47 (48.5%). Most dentists had less knowledge about occupational contact dermatitis, as many as 70 (72.2%) and those who had good knowledge were 27 (27.8%). Then the characteristics are based on behavioral beliefs (attitudes), indicating that most of the categories are positive, namely 61 (62.9%). For the characteristics based on normative beliefs, the most were positive categories, namely 55 (56.7%). For the characteristics of control beliefs (self) the most were positive categories, namely 56 (57.7%). For the characteristics of control beliefs (environment) the most are positive categories as many as 73 (75.3%), and for characteristics based on intention, most of them are in the positive category, namely 67 (69.1%), while for characteristics based on behavior (practice) of 97 respondents indicated that the most pesticide spraying farmers' behavior (practices) in preventing the transmission of cross-infection was in the good category, namely 67 (69.1%).

Based on the results of the analysis using structural equation modeling (SEM) using the smartPLS application, it was found that there was an influence of modifying factors on behavioral beliefs with a p-value of 0.000 <0.05, modifying factors against normative beliefs (encouragement) with a p-value of 0.000 <0.05, modifying factor control beliefs (self) with p-value 0.000 <0.05, modifying factors to control beliefs (environment) with p-value 0.000 <0.05, behavioral beliefs against intention (intention) with p-value 0.009 <0.05, behavioral beliefs against behavior (practice) with p-value 0.001 <0.05, normative beliefs against intention with p-value 0.002 <0.05, control beliefs (self) against intention with p-value 0.018 <0.05, control beliefs (environment) against intention with p-value 0.031 <0.05, control beliefs (environmental) against behavior (practice) with p-value 0.000 <0.05. Meanwhile, there is no influence of modifying factors on intention with a p-value of 0.907> 0.05, modifying factors for behavior (practice) with a p-value of 0.828> 0.05, normative beliefs (encouragement) against behavior (practice) with a p-value. value 0.831> 0.05, control beliefs (self) towards behavior (practice) with a p-value of 0.257> 0.05 and intention to behavior (practice) with a p-value of 0.063> 0.05. The results of the structural equation modeling (SEM) can be seen in the following figure:

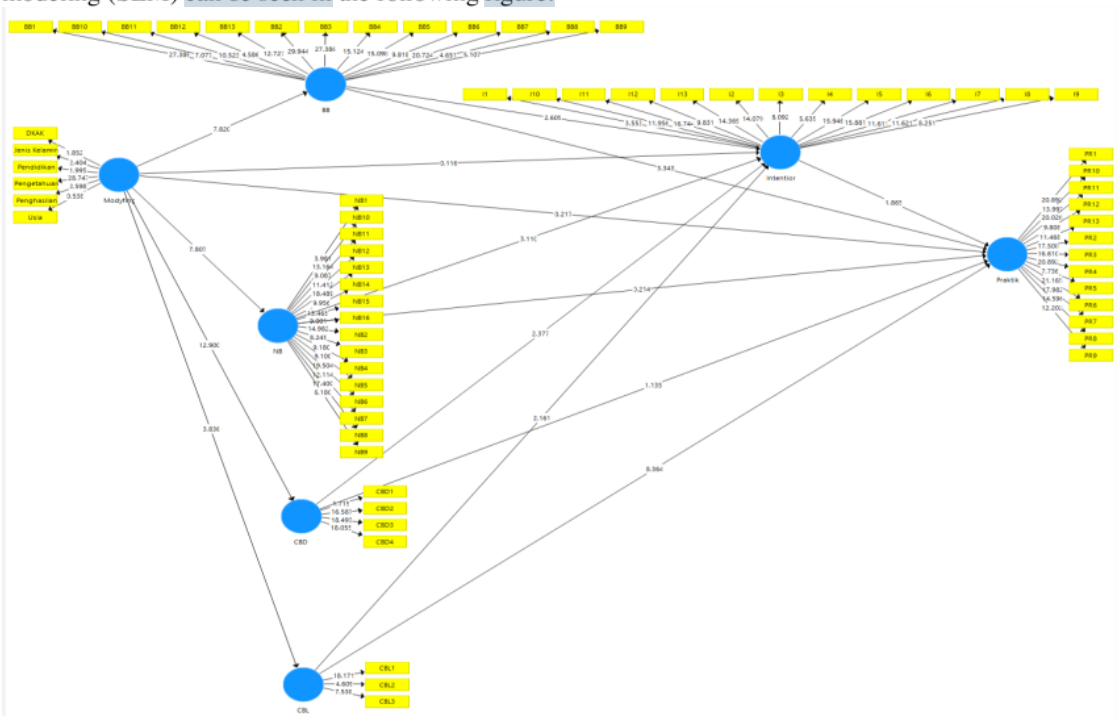

Figure 1.The results of the structural equation modeling (SEM)

In this study, using two theories in preventing occupational contact dermatitis in pesticide spraying farmers in Gowa Regency, namely the theory of Health Belief Models (HBM) and combined with behavioral theory, namely Theory Planned Behavior (TPB). Modifying factors such as age, gender, education, knowledge, income in HBM theory can affect intentions which are influenced by attitudes, encouragement and control of self and the environment which are expected to change the behavior of pesticide spraying farmers at work to avoid occupational contact dermatitis.

In the research that has been done, the results show that there is a significant influence between Modifying Factors and Behavioral Beliefs (Attitudes) which are in line with the research of Larasatietal(2018) and Kusuma&Antarini (2014) showing that knowledge has a significant effect on attitudes, Putra (2013) concluded that the level of education and income has a positive effect on attitudes. Wahyudiono (2016) shows that gender has a significant effect on attitudes. There is significant influence between Modifying Factor and Normative Beliefs (Encouragement), where the results are in line with the research of Virianitaetal(2019), Rita &Kusumawati(2011) which shows that education level affects subjective norms. There is a significant influence between Modifying Factor and Control Beliefs (Self) which is in line with the research of Renita (2017) and Istiqomah&Notobroto (2017) showing that knowledge has an effect on self-control and Rita &Kusumawati(2011) shows that education level affects behavior control. There is a significant influence between Modifying Factors and Control Beliefs (Environment), where this research is in line with Mahyuni's research (2015) which states that pesticide spraying farmers experience health complaints through direct contact due to the influence of the spraying process that does not pay attention to wind direction. There is no significant influence between Modifying Factor and Intention (Intention), which from this study is in line with Maharani's research (2013) which shows that gender has no influence on intention. There is no significant influence between Modifying Factors and Behavior (Practice), which from Istiqomah&Notobroto Research (2017) shows that knowledge affects behavior. Furthermore, according to Notoatmodjo (2007) states that knowledge is a very important domain for the formation of one's behavior. However, this study shows that occupational contact dermatitis prevention behavior occurs without the influence of knowledge. But in this study, pesticide spraying farmers can take precautions without the knowledge factor. This study is in line with Purwidianti&Mudjiyanti(2016) research showing that income does not have a significant impact on family financial behavior in East Purwokerto. Ratna&Nasrah(2015) in her research shows that the variable level of education partially has no effect on consumptive behavior, while the variable level of income partially has a significant effect on consumptive behavior.

In the study, it was found that there was a significant influence between Behavioral Beliefs (Attitude) and Intention (Intention), where this research is in line with the research of Nurkasanah (2017) Renita (2017),Dewi& Sri Ardani(2016) and Wanarta&Mangoting(2014), stating that attitudes have a positive and significant effect on intention, which means that the better the attitude and the higher the intention. Chietal (2012) states that the theory of subjective attitudes and norms can explain people's behavioral intentions. According to Ajzen (1991), this theory explains that the intention to behave is influenced by behavioral belief factors, namely belief in the results of a behavior and evaluation or assessment of the results of that behavior. In this study, it was also found that there was a significant influence between Behavioral Beliefs (Attitude) and Behavior (Practice), where the statistical test results were obtained. This research is in line with Jaya's (2018) research which shows that attitudes have a positive effect on farmer behavior in pest control. Attitudes and behavior are often said to be closely related, as stated by Taylor etal(2012) which states that the relationship between attitudes and behavior can be reciprocal. Attitude may control behavior, and behavior sometimes controls attitude.

In the research that has been done, it is found that there is a significant influence between Normative Beliefs (Encouragement) and Intention (Intention). This research is in line with the research of Nurkasanah (2017), Renita (2017) and Dewi& Sri Ardani (2016) which states that the subjective norm variable has a positive and significant effect on intention, which means that the better the subjective norm, the higher the intention. Wanarta&Mangoting (2014) research states that the most dominant variable affecting intention is subjective norm. Intention comes not only from a person's individual attitudes, but

social and environmental pressures also affect a person before acting Goldstein etal(2008) called subjective norms. In this study, the subjective norms used were divided into several indicators which came from recommendations from the government and peasants. In the research that has been done, it is found that there is no significant influence between Normative Beliefs (Encouragement) and Behavior (Practice). Istanti& Yuniardi (2018) states that the drive for behavior is significant. Theory Planned Behavior argues that when a decision maker feels that other people are important to approve or suggest certain behaviors, the decision maker is more likely to engage in that behavior. But in this study, pesticide spraying farmers could take precautions without the consent or advice of others.

In the research that has been done, it is found that there is a significant influence between Control Beliefs (Self) and Intention. This research is in line with the research conducted by Renita (2017) which states that Control Beliefs (Self) has a positive effect on Intention. Ajzen (1991) also stated that generally, the higher a person's behavior control, the stronger a person's intention to carry out this behavior under their control. In the research that has been done, it is found that there is no significant influence between control beliefs (self) and behavior. This research is in line with Iskandar&Saragih (2018) research that the perception of the ability to control behavior (perceived behavioral control) has no effect on behavior. The results of this study do not support Chang (1998), which states that perceived control over behavior is a strong predictor of a person's behavior. Perception of the ability to control behavior is the perception or ability of an individual to control a behavior, one of which is preventive behavior. In this study, farmers who spray pesticides who have a perception of control over behavior to take strong prevention which then creates a strong intention, do not necessarily manifest in a tangible form of behavior to prevent occupational contact dermatitis.

In the research that has been done, it is found that there is a significant influence between Control Beliefs (Environment) and Intention. Control Beliefs is a perception of the ease or difficulty of a behavior that can be implemented by Ajzen (2005). Sumadi&Sulistyawati(2017) shows that the environment has a positive and significant effect on intention. Previous research also stated that clean water facilities can affect the incidence of dermatitis, Gafur& Syam (2018). In addition, this study is in line with research Mahyuni (2015) which states that farmers who spray pesticides experience health complaints through direct contact due to the influence of the spraying process that does not pay attention to wind direction. Control Beliefs (Environment) on Behavior (Practice) of Pesticide Spraying Farmers has an effect Nardoetal(2018) shows that there is a significant influence of the environment on behavior This is supported by the statement of Robbins (2006) that human behavior is a function of the interaction between the person or individual and the environment. Human behavior is different from one another and their behavior is determined by each environment which is indeed different. Farmers pay great attention to their work environment, both in terms of personal comfort and ease of doing good work. Thus it can lead to preventive behavior.

The intention of pesticide spraying farmers to improve their behavior so as to prevent occupational contact dermatitis has no significant effect on the behavior (practice) of pesticide spraying farmers based on the PLS results with a p value of 0.063. This research is in line with the results of research by Haskas (2017) which found that intention has no significant effect on behavior, but still has a strong intention to want to do it. Fishbeinetal (1975) argues that health behavior is a rational process. The appearance of this action is always preceded by an intention to act or behave in a certain way (behavior intention). It can be concluded that planned behavior can be created without intention. Strong intention does not contribute to work-related contact dermatitis prevention behavior, because the most important thing is control beliefs which are the source for forming perceived behavioral control that directly influence a person's behavior. A person can act based on his intention if he has control over his behavior Ajzen (2002). But in this study, pesticide spraying farmers can take precautions without prior intention.

4. Conclusion

This study concludes that the model is obtained in a significant way, including modifying factors into behavioral beliefs, normative beliefs and control beliefs (self and environment); behavioral beliefs (attitudes) to intention and behavior (practice); normative beliefs (impulse) to intention; control beliefs (self) to intention; and control beliefs (environment) to intention and behavior (practice). Meanwhile, there are insignificant pathways, namely between modifying factors into intention and behavior (practice), normative beliefs to behavior (practice), control beliefs (self) to behavior (practice) and intention to behavior (practice).Suggestions for pesticide spraying farmers can understand and carry out occupational contact dermatitis prevention behavior by increasing control beliefs (environmental) and behavioral beliefs (attitudes), for local government to pay attention to modifying factors and control beliefs in determining programs to prevent contact dermatitis due to work on pesticide spraying farmers and for further researchers to conduct model trials and develop standard operating procedures (SOPs) for the prevention of occupational contact dermatitis in the Pattapang village. sub-district Tinggiimoncong, GowaRegency.

References

1. Tombeng, M., Darmada, I., & Darmaputra, I. (2012). Dermatitis Kontak Akibat Kerja. *Majalah Kesehatan Masyarakat*, *II*, 5.
2. Ministry of Health. (2009). *Profil Kesehatan Indonesia 2008*. Jakarta. Ministry of Health of the Republic of Indonesia. Available from: https://doku.pub/documents/profil-kesehatan-indonesia-2008-4qz396m1w10k
3. Gawkrodger, D. J., & Arden-Jones, M. R. (2013). Dermatology An Illustrated Colour Text. In *Churchill Livingstone Elsevier* (Fifth Edit).
4. Marks, J. G., Elsner, P., & Deleo, V. A. (2002). *Contact & Occupational Dermatology* (Third Edit; L. Fathman, Ed.). USA: Mosby.
5. Retnoningsih, A. (2017). *Analisis Faktor-Faktor Kejadian Dermatitis Kontak Pada Nelayan*. 2–3.
6. Rycroft, R. J. G., Mene, T., Frosch, P. J., & Lepoittevin, J.-P. (2001). Textbook Of Contact Dermatitis. In *Springer-Verlag Berlin Heidelberg* (Third Rdit).
7. Rycroft, R. J. G., & Frosch, P. J. (2011). Occupational Contact Dermatitis. *Contact Dermatitis (Fifth Edition)*.
8. Octiara, D. L. (2018). *Hubungan Perilaku Personal Hygiene Dengan Keracunan Pestisida Melalui Pengukuran Kadar Cholinesterase Dalam Darah Pada Petani Di Pekon Srikaton Kecamatan Adiluwih Kabupaten Pringsewu Tahun 2017*. Universitas Lampung.
9. Bretveld, R. W., Thomas, C. M. G., Scheepers, P. T. J., Zielhuis, G. A., & Roeleveld, N. (2006). Pesticide exposure: The hormonal function of the female reproductive system disrupted? *Reproductive Biology and Endocrinology*, *4*, 1–14.
10. Susilowati, D. A., Widjanarko, B., & Adi, M. S. (2017). Behavioral of Spraying Farmer Related to Serum Cholinesterase Levels. *Media Kesehatan Masyarakat Indonesia*, *13*(4), 289-294.
11. Tombeng, M., Darmada, I., & Darmaputra, I. (2012). Dermatitis Kontak Akibat Kerja. *Majalah Kesehatan Masyarakat*, *II*, 5.
12. Yuantari, M. G. C., Widianarko, B., &Sunoko, H. R. (2015). AnalisisRisikoPajananPestisidaTerhadap Kesehatan Petani. *KEMAS: Jurnal Kesehatan Masyarakat*, *10*(2), 239-245.
13. Perdoski. (2009). Majalah Ilmiah Resmi Perhimpunan Dokter Spesialis Kulit dan Kelamin Indonesia. *Media Dermato-Venereologica Indonesia*.
14. Ministry of Health. (2012). Profile Kesehatan Indonesia. Ministry of Health of the Republic of Indonesia. Available from:https://www.kemkes.go.id/article/view/13010200015/download-pusdatin-profil-kesehatan-indonesia-2012.html
15. Ministry of Health. (2018). *Infodatin K3*. *Pusdatin Kemkes*. Ministry of Health of the Republic of Indonesia. Available from: https://pusdatin.kemkes.go.id/article/view/18100400001/infodatin-keselamatan-dan-kesehatan-kerja.html
16. Putri, A. P. (2019). *Hubungan Tingkat Pengetahuan Terkait Bahaya Pestisida dengan Dermatitis Okupasional Pada Petani Sayur di Kecamatan Ngablak Magelang*. Thesis, Universitas Gadjah Mada.
17. Rahmatika, A. (2019). *Analisis Faktor Risiko Kejadian Dermatitis Kontak Pada Petani Di Kecamatan Punduh*

Pedada. Medical School, Lampung University.
18. Brown, T. (2004). Strategies for prevention: occupational contact dermatitis. *Occupational Medicine*, *54*(7), 450-457.
19. Moshki, M., Zamani-Alavijeh, F., &Mojadam, M. (2017). Efficacy of peer education for adopting preventive behaviors against head lice infestation in female elementary school students: a randomised controlled trial. *PloS one*, *12*(1), e0169361.
20. Armitage, C. J. (2005). Can the theory of planned behavior predict the maintenance of physical activity?. *Health psychology*, *24*(3), 235.
21. Larasati, A., Hati, S. R. H., & Safira, A. (2018). Religiusitas dan Pengetahuan Terhadap Sikap dan Intensi Konsumen Muslim untuk Membeli Produk Kosmetik Halal. *Esensi: Jurnal Bisnis Dan Manajemen*, *8*(2), 105–114.
22. Kusuma, I. D., & Untarini, N. (2014). Pengaruh Pengetahuan Produk Terhadap Niat Beli Dengan Sikap Sebagai Variabel Intervening. *Jurnal Ilmu Manajemen*, *2*(4), 1573–1583.
23. Wahyudiono, A. (2016). Pengaruh Pendidikan Kewirausahaan, Pengalaman Berwirausaha, dan Jenis Kelamin Terhadap Sikap Berwirausaha Pada Mahasiswa Fakultas Ekonomi Universitas Muhammadiyah Surabaya. *Jurnal Ekonomi Pendidikan Dan Kewirausahaan*, *4*(1).
24. Virianita, R., Soedewo, T., Amanah, S., & Fatchiya, A. (2019). Farmers' Perception to Government Support in Implementing Sustainable Agriculture System. *Jurnal Ilmu Pertanian Indonesia*, *24*(2), 168–177.
25. Rita, M., & Kusumawati, R. (2011). Pengaruh Variabel Sosio Demografi dan Karakteristik Finansial Terhadap Sikap, Norma Subyektif dan Kontrol Perilaku Menggunakan Kartu Kredit (Studi Pada Pegawai di UKSW Salatiga). *Jurnal Manajemen Dan Keuangan*, *9*(2).
26. Maharani, W. I. (2013). *Pengaruh Pengetahuan, Tingkat Pendidikan, Jenis Kelamin dan Perilaku Hijau Sebelumnya Terhadap Niat Konsumen Untuk Menggunakan Reuse Bag (Tas Pakai Ulang) Di Yogyakarta*. Thesis, Universitas Gadja Mada.
27. Istiqomah, N., &Notobroto, H. B. (2016). PengaruhPengetahuan, KontrolDiriterhadapPerilakuSeksualPranikah di KalanganRemaja SMK di Surabaya. *JurnalBiometrika dan Kependudukan*, *5*(2), 125-134.
28. Mahyuni, E. L. (2015). Faktor Risiko Dalam Penggunaan Pestisida Pada Petani Di Berastagi Kabupaten Karo 2014. *Jurnal Kesehatan Masyarakat (Journal of Public Health)*, *9*(1), 79–89.
29. Notoatmodjo, S. (2007). *Promosi Kesehatan & Ilmu Perilaku*. Jakarta: Rineka Cipta.
30. Purwidianti, W., & Mudjiyanti, R. (2016). Analisis Pengaruh Pengalaman Keuangan dan Tingkat Pendapatan Terhadap Perilaku Keuangan Keluarga di Kecamatan Purwokerto Timu. *Jurnal Manajemen Dan Bisnis*, *1*(2), 141–148.
31. Ratna, I., & Nasrah, H. (2015). Pengaruh Tingkat Pendapatan dan Tingkat Pendidikan Terhadap Perilaku Konsumtif Wanita Karir di Lingkungan Pemerintah Provinsi Riau. *Marwah*, *14*(2).
32. Nurkasanah, B. (2017). *PengaruhSikap dan Norma SubjektifTerhadapNiatPartisipasiPetanidalamAsuransiPertanian*. Thesis, Universitas Brawijaya.
33. Renita, D. (2017). *NiatPetaniDalamAdaptasiPerubahanIklim Di Kabupaten Kediri*. Thesis, Universitas Brawijaya.
34. Dewi, N., & Sri Ardani, I. (2016). Pengaruh Sikap Dan Norma Subjektif Terhadap Niat Beli Ulang Produk Fashion Via Online Di Kota Denpasar. *E-Jurnal Manajemen Universitas Udayana*, *5*(4), 253985.
35. Wanarta, F. E., & Mangoting, Y. (2014). Pengaruh Sikap Ketidakpatuhan Pajak, Norma Subjektif, dan Kontrol Perilaku yang Dipersepsikan terhadap Niat Wajib Pajak Orang Pribadi untuk Melakukan Penggelapan Pajak. *Tax & Accounting Review*, *4*(1), 138.
36. Chi, H., Yeh, H., & Hung, W. (2012). The Moderating Effect of Subjective Norm on Cloud Computing Users' Perceived Risk and Usage Intention. *International Journal of Marketing Studies*, *4*(6), 95–102.
37. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179-211.
38. Jaya, K. (2018). Peran Pengetahuan, Locus of Control Dan Sikap Terhadap Perilaku Petani Bawang Merah Dalam Pengendalian Hama Di Kabupaten Sigi. *Jurnal Agrotech*, *8*(1), 1–7.
39. Taylor, S. E., Peplau, L. A., & Sears, D. O. (2012). *Social Psychology* (12th Editi). Los Angeles: Pearson Education, Inc.
40. Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research*, *35*(3), 472–482.
41. Istanti, S. R., & Yuniardi, M. S. (2018). Inferiority dan Perilaku Bullying Dimediasi Oleh Dorongan Agresi Pada Remaja Sekolah Menengah Pertama. *Jurnal Ilmiah Psikologi Terapan*, *06*(02), 3–11.
42. Iskandar, A., & Saragih, R. (2018). the Influence of Attitude Toward the Behavior, Subjective Norms, and Perceived Behavioral Control on Whistle-Blowing Intention and Behavior of CPNS. *Journal of Finance and Accounting*,

9(18), 1–5.
43. Chang, M. K. (1998). Predicting Unethical Behavior: A Comparison of the Theoryof Reasoned Action and theTheory of Planned Behavior. *Journal of Business Ethics,17*(16), 1825–1834.
44. Ajzen, I. (2005). Atttudes, Personality and Behavior. In *International Journal of Strategic Innovative Marketing* (Vol. 3). New York: Open University Press.
45. Sumadi, A., & Sulistyawati, E. (2017). Pengaruh Sikap, Motivasi, Dan Lingkungan Terhadap Niat Berwirausaha. *E-Jurnal Manajemen Unud*, *6*(2), 1007–1029.
46. Gafur, A., & Syam, N. (2018). Determinan Kejadian Dermatitis Di Puskesmas Rappokalling Kota Makassar. *Fakultas Kesehatan Kesehatan Universitas Muslim Indonesia*, *1*(1), 21–28.
47. Nardo, R., Evanita, S., & Syahrizal. (2018). Pengaruh Kepemimpinan Transformasional, Dan Lingkungan Kerja Non Fisik Terhadap Perilaku Inovatif. *JEBI (Jurnal Ekonomi Dan Bisnis Islam)*, *3*(2), 209.
48. Al-Nihmi, F. M. ., Salih, A. A. ., Qazzan, J. ., Radman, B. ., Al-Woree, W. ., Belal, S. ., Al-Motee, J. ., AL-Athal, A. ., Al-Harthee, A. ., Al-Samawee, H. ., Al-Samawee, B. ., & Atiah, H. . (2020). Detection of Pathogenic Waterborne Parasites in Treated Wastewater of Rada'a City -Yemen. *Journal of Scientific Research in Medical and Biological Sciences,* 1(1), 30-39. https://doi.org/10.47631/jsrmbs.v1i1.23
49. Robbins, S. P. (2006). *Perilaku Organisasi*. Jakarta: PT Indeks Kelompok Gramedia.
50. Haskas, Y. (2017). Pengaruh Niat Penderita Terhadap Perilaku Pengendalian Diabetes Melitus Di Kota Makassar. *Global Health Science*, *2*(4), 220–225.
51. Fishbein, M., Ajzen, I., & Flanders, N. A. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research* (I. Ajzen, Ed.). Addison-Wesley.
52. Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and The Theory of Planned Behavior. *Journal of Applied Social Psychology*, *32*(4), 665–683.

ISSN: 2005-4238 IJAST

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3	event.ners.unair.ac.id Internet Source	%1
4	digilib.uin-suka.ac.id Internet Source	%1
5	digilib.unila.ac.id Internet Source	%1
6	Kanerva s Occupational Dermatology, 2012. Publication	%1
7	"Contact Dermatitis", Springer Science and Business Media LLC, 2011 Publication	%1
8	mafiadoc.com Internet Source	%1

9	epdf.tips Internet Source	%1
10	Laily Dwi Arsyianti, Adelia Adelia. "SHARIA COMPLIANCE-CREDIT CARD EXPOSURE AND UTILIZATION IN THE GROWING DIGITAL ECONOMY", Journal of Islamic Monetary Economics and Finance, 2019 Publication	%1
11	news.unair.ac.id Internet Source	%1
12	ejournal.unsub.ac.id Internet Source	<%1
13	journals.plos.org Internet Source	<%1
14	"Abstracts of the Asian Congress of Nutrition 2019", Annals of Nutrition and Metabolism, 2019 Publication	<%1
15	Debra M. Bath. "Predicting Social Support for Grieving Persons: A Theory of Planned Behavior Perspective", Death Studies, 2009 Publication	<%1
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	Series: Earth and Environmental Science, 2019 Publication	
17	journal.unair.ac.id Internet Source	<%1
18	Heni Fa'riatul Aeni, Lilis Banowati, Evi Nur Avivah. "Determine The Factors Related to The Incidence of Dermatitis among Fishermen", Journal of Physics: Conference Series, 2020 Publication	<%1
19	jim.unsyiah.ac.id Internet Source	<%1
20	Contact Dermatitis, 2006. Publication	<%1
21	ejournal.uin-suska.ac.id Internet Source	<%1
22	"Atopic and Contact Dermatitis", Clinical Allergy, 2009 Publication	<%1
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	journal.ipb.ac.id	

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30	Handbook of Occupational Dermatology, 2000. Publication	<%1
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Publication

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