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The Level Of Knowledge Of Soldiers on the Force Denkav 4/SP Kodam IX/Udayana About Tinea Pedis

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Abstract.*TNI soldiers carry out their duties in the field and at the posts of the knight, almost 24 hours they must always be on standby and carry out their duties in full uniform, feet will always be wrapped in socks and shoes for a long time because it will affect the health of their skin. The fungus will breed and will cause tinea pedis around the soles of the feet and also between the toes. The purpose of this study is to determine the characteristics of respondents based on age, education level, and rank, and to know the soldiers' knowledge level about Tinea Pedis in the Denkav 4 / SP Kodam IX / Udayana Unit. The design used in this scientific paper was descriptive univariate. This study used systematic random sampling, which was by taking samples that have even attendance numbers in attendance numbers. Samples taken in the study were 82 TNI soldiers in the Denkav 4 / SP Kodam IX / Udayana unit. The measuring instrument used 20 questionnaire statements made by researchers who have tested their validity and reliability. Most of the respondents were aged 26-35 years with a total of 47.6%, the highest level of education was Senior High School / equivalent amounting to 82.9%, and the most rank/class was non-commissioned officer with a total of 64.6%. Most of the respondents had a sufficient level of knowledge, amounting to 45 people or 61.6%. The result of this research is that most of the respondents have a good level of knowledge (57.3%). Because there are still respondents who have a low level of knowledge, it is hoped that the health section in the Denkav 4 / SP Kodam IX / Udayana unit will conduct health education every quarter to increase the knowledge of its members to prevent disease.*

Keywords: *TNI Soldier, Knowledge Level,Tinea Pedis*

1. INTRODUCTION

The defense tools of the country in carrying out its duties in accordance with the policy and political decisions of the country are the role of the TNI soldiers. The main task that is based on Pancasila and the 1945 Constitution is to maintain the sovereignty of the country, maintain the integrity of the territory of NKRI, and provide protection for every nation and all the spill of Indonesia both threats and disruption to the integrity of the nation and State [1]. TNI soldiers who perform tasks in the field and knight posts, not uncommonly almost 24 hours even more, must always be on standby and carry out the task in a complete uniform, where the feet will always be wrapped in socks and shoes for a long time because it will definitely affect skin health. Fungi will freely multiply and will cause tinea pedis disease (water tick) around the soles of the feet and also on the sidelines of the toes [2]. Tinea pedis (water tick) is a fungal infection in the soles of the feet, space between the toes, and/or toenails. More commonly called athlete's foot (athlete's foot disease), tinea pedis is the most common tinea infection. Lesions vary from mild scales to painful fissures with drainage, and those lesions are usually accompanied by pruritus and stinging odors. This infection is often chronic, nonexistent during winter, and reappears in hot weather when sweating feet wear shoes [3]. The risk of a person

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experiencing water lice there is several factors, including visiting public places without being with bare feet, using tight and thick shoes, feet often sweat, not keeping feet always clean, such as after activities rarely washing feet and reusing unwashed socks, there are wounds on nails or toes, sharing personal objects, such as towels, socks or shoes. The impact is that performance can be disturbed. If this is not noted with sufficient knowledge and correct prevention, some complications that will occur are spreading an infection to other areas of the body, such as toenails, groin, or hand. Furthermore, the spreading infection can cause lymphangitis, namely inflammation of the lymph tract or lymphatic vessels, and lymphadenitis, or inflammation of the lymph [4]. One preventive (preventive) effort and recurrence of patients who have not and have been exposed to tinea pedis, is to be done by adding knowledge of the causes, risks, impacts and prevention of recurrence and with the proper treatment of tinea pedis disease or water tick. As well as taking into account internal factors such as maintaining body hygiene or external factors i.e. environmental, e.g. maintaining always bathroom cleanliness. Low knowledge can lead to unsuccess in disease treatment efforts [5]. The prevalence of tinea pedis (water ticks) spread around the world varies from each country. The World Health Organization (WHO) study of incidents of dermatophyte infections states that 20% of people from around the world have dermatophyte infections, and one of them is tinea pedis [6]. Indonesia is one of the countries with a high temperature and humidity tropical climate, so it is a good atmosphere for fungal growth. Hygiene also plays a role in the onset of this disease, so that in all places can be found the fungus. The incidence of fungal-induced diseases in Indonesia ranged from 2.93-27.6% from 2009-2011 [7]. Dermatomycosis ranks second after pityriasis versicolor. Dermatomycosis is 52%. The most common cases are tinea pedis [8]. Preliminary study conducted with soldier members in the Denkav 4/SP Kodam IX/Udayana Jl unit. Kediri No.1 Pesalakan Tuban, Kuta, Bali on July 23, 2019, obtained data on the number of soldiers in Denkav 4/SP Kodam IX/Udayana 10 people, who experienced tinea pedis/water fleas varied like blisters around the soles of 3 people, on the sidelines of the toes (4th and 5th fingers), as many as 4 people, and dry skin, crack, thicken and peeling in the soles of the feet and surrounding 3 people. The results of the interview with 10 soldiers were obtained, that the constraints related to prevention and relapse include duration of work, almost 24 hours in the field can even be more, and also the impact of fatigue after completion. So foot treatment becomes neglected and the recurrence of tinea pedis that has been suffered or has done treatment becomes more common. Based on the data above, researchers are interested in taking the title “Answerving Warrior’s Knowledge Level of Tinea Pedis (Water Lice) in the Denkav 4/SP Kodam IX/Udayana unit.

2. THEORY

Tinea pedis is a fungus that infects the soles of the feet, space between the toes, and/or toenails. More commonly called athlete's foot (athlete's foot disease), the most common tinea pedis infection itself. Lesions vary from mild scales to painful fissures with drainage, and the lesions are usually accompanied by pruritus accompanied by a foul odor. This infection is often chronic, nonexistent during winter, but reappears in hot weather when sweating feet wear shoes [17]. Tinea pedis is a superficial fungal infection of the ankles, soles, and sidelines of the toes [8]. According to Syahidah (2019) Tinea pedis is an infectious dermatophyte infection, occurring in the soles of the feet and interdigitalis areas that grow well in humid conditions and more occur in men [20]. Dermatophyte is a fungi group that needs keratin for their growth, as a result of the infection that the dermatophytes cause will attack tissues containing keratin such as skin, hair, and nails. Tinea pedis is generally caused by Trichophyton rubrum, T. interdigitale, and Epidermophyton floccosum. Tinea pedis is not infrequently referred to as Athlete's foot because of the high incident number in the feet of athletes, it is associated with the use of shoes covered in sweating feet as a result of which results in a humid environment and facilitates the growth of fungi. Tinea pedis is a fungal infection that is easily contagious through exclusive relationships in infected skin, as well as exclusive non-relationships in the top that have been contaminated with fungi causes. It is estimated that approximately 70% of the population will experience tinea pedis at some point in its life. The highest prevalence of tinea pedis is still present in ages 31-60 with higher incidence rates in men than women.

3. METHODS

The design used in the preparation of scientific writing is descriptive, Probability sampling used in this study is systematic random sampling probability. Systematic random sampling i.e. in this technique sample is taken randomly only for the first element, then selected systematically according to the set step. The sampling requirement systematically is the availability of a sample frame, the population has a pattern of irregular patterns such as home blocks, patient massage numbers, and a slightly homogeneous population [19]. The study took a population of all TNI soldiers in the Denkav 4/SP Kodam IX/Udayana unit of 275 people. The sample taken in the study was the TNI soldier in the Denkav 4/SP Kodam IX/Udayana unit of 82 people. The type of instrument used is a questionnaire that is spread online using Google Forms. The research instrument used in this study is a knowledge-level questionnaire consisting of 20 statement items. "The statement used is a dichotomy statement where the respondent simply responded "right" or "wrong". Each correct answer will get a value of 1, and

the wrong answer will get a value of 0. This knowledge level questionnaire was created by researchers so that researchers conduct validity and reliability tests in the TNI ranks serving in Makodam IX/Udayana through the Google form media with the same respondent characteristics and the obtained results are classified as valid with Sig. (2-tailed) <0.05 and the Pearson correlation is positive. This questionnaire is also declared reliable with an alpha Cronbach value >0.666. The processed data is then analyzed with descriptive analysis. In this study, researchers used a descriptive statistical analysis univariate, namely the analysis performed on each variable of the results of the study using SPSS series 25 to make conclusions about the level of knowledge of the soldier [19]. The variable in this study is the nominal data scale so the presentation of data is in the form of frequency distribution tables. "In variable, the level of knowledge is grouped into 3, namely "well, enough, and less".

4. RESULT

1. The results of the study found that of 82 respondents, data obtained at the age of 17-25 years as many as 7 people or 8.5%, ages 26-35 years as many as 39 people or 47.6%, ages 36-45 years as many as 34 people or 41.5% and at the age of 46-55 years as many as 2 people or 2.4%.
2. The data found that of 82 people who were educated Junior/Equal Certificate 2 people or 2.4%, who were educated SMA/Equal 68 people or 82.9%, who were educated Diploma (D1, D2, and D3) of 5 people or 6.1%, who were educated Bachelor/D4 of 6 people or 7.3%, and who educated Postgraduate (S2, S3) of 1 person or 1.2%.
3. The data found that of 82 respondents who ranked officers 6 people or 7.3%, who ranked 53 people or 64.6%, and who ranked 23 people or 28.1%.
4. Respondents with a knowledge level of either 47 people or 57.3%, respondents with a knowledge level of 26 people or 31.7%, and respondents with a knowledge level of less than 9 people or 11%.

5. DISCUSSION

Based on the analysis of the characteristics of the respondents found that of 82 respondents, data obtained most of the respondents were between the ages of 26 and 35 (47.6%). According to [3], this age includes a productive age with great activity so that the production of sweat also affects skin moisture, and also productive age usually maintains appearance and strives not to be exposed to skin diseases i.e. water tick (tinea pedis) in particular. In addition to age, the study also gained characteristics based on the level of

education. The highest education rate is the high school/Equality respondents who are 82.9%. As we know, the higher the level of education a person the more knowledge has. Instead, less education will hinder the development of one's attitude toward newly introduced values [13]. According to researchers, the level of high school education is enough education for a person to gain more knowledge so that they are then ready to follow further education to college. Then obtained also characteristics based on rank/group i.e. most respondents ranked Bintara amounting to 64.6%. This is because the rank/group and education are interrelated and influenced by the requirements of becoming a TNI-AD Bintara which is the condition of being a minimally educated Bintara SMA / Equal. The rank of Bintara has many functions in its unity as the leader of the smallest unit, namely as Commander of the Guild, Bintara also serves as a coach and military teacher both in military education institutions such as Rindam, as well as as coach of his own squad in its unity. So, a Bintara must have more science, both in the military and general science fields [21]. According to researchers, the facts in the field of Bintara Warriors are often relied on by their instances. The position of a staff is dominated by Bintara, such as intelligence staff, operations staff, personnel staff, and logistics staff so a Bintara soldier is required to master computers, social communication, and other science. Besides characteristics, this study also obtained the results of univariate analysis of knowledge level, which is that most respondents have a good knowledge level of 57.3%. The level of knowledge of the soldier about tinea pedis (water tick) is dominant because every year there are twice the activities of field health education namely in quarter 1 and quarter 2 organized by the health section in the Denkav 4/SP Kodam IX/Udayana unit. Enough level of knowledge is also influenced by the level of education of the soldier who is average high school educated and some are also educated with diplomas and scholars. There is also a lower knowledge level because some soldiers still have not received education due to the solid outside activities of the unit, both security and other outside tasks. It is also influenced by some respondents who are also educated junior/equal. According to Notoatmodjo (2010) in theory, the higher the level of formal education of a person, the better also the knowledge and awareness of one's attitude in dealing with the disease, but one whose low education level does not absolutely have a piece of low knowledge and awareness because knowledge can be obtained non formally, and other factors can also affect.

6. CONCLUSION

Based on the results of the above study, it can be concluded that the figure of the level of knowledge of the soldier about tinea pedis (water tick) in the Denkav 4/SP Kodam IX/Udayana unit with the total number of respondents of 82 people, obtained data that most respondents aged 26-35 years (early adult), educated high school/equal, and ranked Bintara. The level of knowledge of the soldier about tinea pedis (water tick) in the Denkav 4/SP Kodam IX/Udayana unit is mostly good.

RECOMMENDATION

1. It is expected that further researchers use a print questionnaire so that they can communicate directly with responders so that there will be trust between respondents and researchers when the COVID-19 pandemic is over.
2. I hope that the next researcher will ensure that the respondents are truly willing to comply with the specified inclusion criteria so that no more respondents are willing to fill in the questionnaire.
3. Because respondents who have low knowledge are still found, it is expected that the health section in the Denkav 4/SP Kodam IX/Udayana unit to conduct health education every quarter to improve the knowledge of its members to prevent disease.

REFERENCES

Agustine, R. (2012). Comparison of sensitivity and specificity of direct prepare inspection of KOH 20% with centrifugation and no centrifugation on tinea kruris, 35–38. http://repository.unand.ac.id/18063/

Amin, M. Al, & Juniati, D. (2017). Classification of human age group based on fractal dimensional analysis of box counting fractal image with Canny edge detection. Scientific Journal of Mathematics, 2(6), 1–10.

Budiman, & A, R. (2013). Kapita selecta quisionary knowledge and attitude in health research. Salemba Medica.

Djuanda, A. (2005). Skin and gender disease science (Volume 2). Faculty of Medicine UI.

Farihatun, A., Nurmalasari, A., Biathi, E., Sumirah, M., Setiawan, D., & Wahlanto, P. (2018). Meditation SAFE Ciamis SARI Ciamis Sarient 2017. Meditory, 6(7), 56–60.

Harahap, M. (2000). Skin disease science. Hypocrates.

Hurlock, E. (1996). Developmental psychology (& A. Language: dr. M. M. T. & D. M. Z. (Eds.)). Erlangga.

Lakshmipathy, D. Q., & Kannabiran, K. (2010). Review on dermatomycosis: Pathogenesis and treatment. Natural Science, 02(07), 726–731. https://doi.org/10.4236/ns.2010.27090

Legalities, A. A. (2018). Pathophysiology of tinea pedis. Alomedica. https://www.alomedika.com/penyakit/dermatovenerologi/tinea-pedis/patofisiologi

LeMone, P., Burke, K. M., & Bauldoff, G. (2017). Medical nursing teaching book (M. T. Iskanda, Ed.; 5th ed.). EGC.

Muliadi, D. (2015). Relationship of knowledge level to transmission of fishermen skin disease in North Sumatra Toba village. University of North Sumatra, 102, 7–37.

Napitupulu, A., Subchan, P., & Widodo, Y. (2016). Prevalence and risk factors of tinea pedis in Semarang City traffic police, 6–15.

Notoatmodjo, S. (2010). Health research methodology. Rineka Cipta.

Notoatmodjo, S. (2014). Health promotion theory and application. Rineka Bineka.

Nursalam. (2011). Concept and application of nursing science research methodology. Salemba Medica.

Pratiwi, T. T. (2018). An overview of the level of knowledge of the police investigator in the jurisdiction of the city of Cimahi about visum et repertum.

Priyatno, E. T. (2019). Knowledge about prevention of recurrence of tinea pedis (water lice) in members of the warrior at Satlak Denpom Divif 2 Kostrad Lawang Malang - Repository institution Poltekkes Hospital dr. Soepraoen Malang. http://repository.poltekkes-soepraoen.ac.id/387/

Rizky, & Muhammad. (2018). Dematocositosis Indervient Sikend and Dermatocomositosis in Puscesmation Sukoharjo Disu. Journal of Chemical Information and Modeling, 9, 1689–1699.

Sally, E. B., M, S., Khan, D., & J, T. (2012). Oral treatments for fungal infections of the skin of the foot. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003584.pub2/full#:~:text= We found terbinafine and itraconazole,tend to be most evaluated.

Shahydah, A. A. (2019). Tinea pedis: Pathophysiology, diagnosis, and managing. Alomedica. https://www.alomedika.com/penyakit/dermatovenerologi/tinea-pedis

Siregar, R. S. (2005). Skin disease saripathy (H. Hartanto, Ed.; 2nd ed.). EGC.

Sora, N. (2020). Understanding work and examples around us. http://www.pengertianku.net/2017/02/pengertian-pekerjaan-dan-examples.html

Surahman, Rachmat, M., & Supardi, S. (2016). Research methodology. Health HR Pusdik. http://library1.nida.ac.th/termpaper6/sd/2554/19755.pdf

TNI, P. (2020). Role of TNI functions and tasks. https://tni.mil.id/pages-2-peran-fungsi-da

TNI. (2010). Comparison of the Indonesia Nomor 39 Years 2010 administration of the Indonesian National Army (Tentara Nasional Indonesia). TNI.