The Explanation Of The Level Of Knowledge And Attitude Of The 12-Year-Old Students On Syphilis Prevention At The School Of The General Secondary Education Railaco Ermera, Timor-Leste (2025)

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Citation: Carlos Boavida Tilman. The Explanation Of The Level Of Knowledge And Attitude Of The 12-Year-Old Students On Syphilis Prevention At The School Of The General Secondary Education Railaco Ermera, Timor-Leste (2025). AJMCRR. 2025; 4(2): 1-10.

Abstract

Introduction: It is based on data from the World Health Organization (WHO, 2023) indicating that, from 2015 to 2020, there were 2,000 confirmed cases of syphilis in men and 1,085 cases in women, a total of 45.8% of cases. Ministry of Health in Timor-Leste in the year 2023, in the National territory with a total of 10,514 of the number of cases that positive patients 171 of cases, according to the report presented annually by the Ministry of Health Timor-Leste.

Research Objectives: To know the knowledge and attitude of students about the prevention of syphilis at the General Secondary School of Railaco Ermera.

Research Methodology: We use the research methods is quantitative descriptive, probability sampling technique of the technical type simple random sampling with simple random way of random. Of the population are students of the General Secondary School and 69 samples. Technical data collection is the instrument of questionnaires that were applied in the research.

Discussion Results: Based on Pearson's statistical correction analysis that there is a relationship between knowledge with syphilis prevention of P value 0.001 < 0.05, there is a relationship between knowledge of understanding with syphilis prevention of P value 0.001 < 0.05, there is a relationship between knowledge of application with syphilis prevention of P value 0.001 0.05, there is a relationship between knowledge of application with syphilis prevention of P value 0.001 0.05, there is a relationship between knowledge of application with syphilis prevention of P value 0.001 0.05, there is a relationship between knowledge of application with syphilis prevention of P value 0.001 < 0.05, there is a relationship between the attitude and syphilis prevention of P value 0.001 < 0.05, not accepted from H0.

Conclusion: There is a positive and significant relationship between knowledge of knowledge, understanding, application and prevention of moderate categorially syphilis cited by (Tilman CB., 2025).

Introduction

The World Health Organization (WHO, 2024) indicate that, annually, there are about 12 million new cases in the adult population worldwide, most of them in developing countries. Regarding the Brazilian reality, the number of cases increased by more than 4,000% in the period from 2015 to 2021. According to the WHO (2022), indicate that, in the period from 2018 to 2021, there were 2,000 confirmed cases of syphilis in men and 1,087 cases in women, with a percentage difference of 46.8%, where the prevalence is a higher incidence rate of notification of cases of syphilis for males, and this contamination rate has been contrasted with all regions of Brazil, the one with the highest number of confirmed cases was the Southeast Region, followed by the North and Northeast Regions, and when making comparisons with genders, males had higher percentages of reported cases in all regions. Global data from 2022, the number of adults infected with syphilis was 36.5 million, with 10.8 million new infections each year. In 2021, there were 36 cases of syphilis in China per 100,000 inhabitants. In 2019 – 2021, the number of syphilis carriers increased by 76%, from 17,375 cases to 30,644 cases. The total number of syphilis cases in 2019 was 25.4 cases per 100,000 adult population.

The Ministry of Health in Indonesia, 2023; noted that there were 21,785 people confirmed to be infected with syphilis. The majority of patients with syphilis are male, i.e., 54%, while female patients are 47%. The profile of patients was based on gender, where 48% were confirmed to have syphilis, while in the male group it was 55%. 4% of children under the age of 4 are affected by syphilis, followed by 0.26% aged 5 to 15 years, 6% aged 6 to 20 years, 24% aged 20 to 24 years. 25 years old, while for those under 52 years old it is 6% with affected syphilis, cited by (Tilman CB., 2025).

According to the Ministry of Health Timor-Leste year 2023, which indicate that people suffered the most risks of syphilis infections, however, the Ministry of Health that distributes test kits to Health Center and Health Post in the National Territory, to do the test at the blood donation site and to make the diagnosis, because syphilis infections and more prevalent populations are at risk. In Timor-Leste, which suffers from the highest risk of syphilis has five Municipalities of Timor-Leste are: Municipality Dili, Liquica, Baucau, RAEOA/Oecussi, Suai Covalima and Bobonaro cited by (Tilman CB., 2025).

The cases begin in 2020, the Ministry of Health will test for syphilis infections in the Health Center and in the Health Post in the National territory, total 10,518 cases of the total number of patients in positive cases. In Municipality Dili has 4,169 of the number of cases, total patients in positive has 56 cases, in Municipality Baucau 1,088 of the number of cases, total of positive patients 28 cases, RAEOA/ Oecussi has 1,0842 of the number of cases, total patients with positives have 18 cases, Municipality Covalima 2,117 cases total patients with positive 42 cases and last Municipality of Bobonaro 2,062 of the number of shards 33 people according to report of health cited by (Tilman CB., 2025).

In 2022, the number of people who get tested is 10,416 of the number of cases, this is the total of 918 positive cases. In the Municipality of Dili 4, 265 cases this to the total of positive patients has 398 cases, Baucau Municipality 909 of cases, total of positive patients 115 cases positive patients 89 of cases, of RAEOA/ Oecusse 1008 of cases of positive patients 132 cases, Municipality of Suai Covalima 2116 of cases of the numbers this to the total of positive patients has 140 cases, and last in the Municipality of Bobonaro 173 cases of positive 156 cases or people cited by (Tilman CB., 2025).

Research Objectives: To know the level of data and attitude of students about syphilis prevention at the Railaco General Secondary School, Railaco Ermera of Timor-Leste.

Theoretical Context

Human knowledge according to how it is divided into 6 levels, such as:

1. Knowing is like remembering previously learned material. Included in this level of information is the recollection of something specific from all the material studied or the stimuli received. So, knowing is the lowest level.

2. Understanding is like an ability to correctly explain about what is already known and can interpret the material correctly.

3. Application can be interpreted as an ability to use material that has been studied in a real-world condition.

4. Analysis is an aptitude to describe a material or an object as a component, but still within the organizational structure and still related to each other.

5. Synthesis is an ability to constitute or connect, plan, summarize, adapt something to existing theories or formulations.

6. Evaluation refers to the ability to make an assessment of a material or object, this appraisal is based on self-determined criteria.

The information scale is defined by Sri Lestari as follows: Good knowledge (76% - 100%), Adequate knowledge (56% - 75%) and Less data (Nursalam, 2022) (< 55%). According to Rahayu (2018) there are seven (7) parts that the influence of knowledge is: education, experience, age, information, socio-culture, service and environment. According to Notoatmodjo, 2016, that attitude It consists of several levels:

1. Receiving and accepting means that someone (subject) wants and attention to a particular stimulus (object).

2. Responding from answers when prompted, doing and completing a given task is an indication of attitude.

3. Appreciating (appreciating) and inviting others to work on or discuss something problem is an indication of three-level attitudes.

4. Responsible and accountable for everything you have chosen with all the risks is the highest attitude.

Syphilis is a type of Sexually Transmitted Disease (STD). Thus, syphilis is a sexually transmitted disease caused by chronic Treponema pallidum. This bacterium enters the human body through mucous membranes (e.g. vaginally or in the mouth) or through the skin (Kent and Romanelli, 2018). To the same thing was also asserted by Ecclestone, et. al. (2017), that syphilis is a sexually transmitted infection caused by the spirochete bacterium Treponema pallidum subspecies pallidum. Subspecies Treponema pallidum is a highly agile, spiral-shaped Gram-Negative bacterium. Three other diseases in the human body are caused by Treponema

pallidum, including pâte, (subspecies per tenue), design, (subspecies curate). Unlike the "pallidum" subtype, the species does not cause neurological disease. Humans are the only "pallidum" subspecies known to be natural reservoirs (Karp, et.al, 2018; cited by Tilman CB., 2025).

Treponema pallidum belongs to the class and genus Spirochaete treponemes that have the shape of a spiral with a length between 5-20 microns and 0.1-0.2 microns wide, easily seen with a dark-field microscope it looks like a spiral that can perform movements such as rotation. This organism anaerobes are easily killed by soap, oxygen, and safranin. In donor blood stored in the Treponema Pallidum refrigerator will die within three days, but can be transmitted by transfusion using fresh blood (Soedarto, 2018). The main route of transmission is through sexual contact. This infection can also be transmitted from mother to fetus during pregnancy or at birth, which causes congenital syphilis (Koss, et, al. 2016). The same was stated by Battis (2014), that syphilis is a sexually transmitted infection caused by the bacterium Treponema pallidum. Transmission by sexual contact, direct contact, and congenital syphilis (via mother to child in utero). According to Coffin et, al. (2016), syphilis is a chronic venerer disease. Even though the frequency of syphilis is decreasing, it is still a dangerous disease because it can attack all organs of the body, including the circulatory and nervous systems, and can be transmitted by pregnant women to the baby they carry. A pregnant woman who is positive for syphilis can cause confectionery effects on the baby (Hawkes, et, al. 2018; cited by Tilman CB., 2025).

According to (Kent and Romanelli, 2017) syphilis symptoms usually begin to occur within 1 – 13 weeks after infection. The infection can persist for years and rarely causes heart damage, brain damage, or death. Other symptoms are feeling unwell (malaise), loss of appetite, nausea, fatigue, fever and anemia. Whereas in the latent fa where there are no symptoms. This face can last year or decades or even the long of life surfer. At the beginning of the latent phase, sometimes the wound infection reappeared. The clinical symptoms of syphilis according to the World Health Organization guidelines for actions and role in the classification standard (WHO, 2019; cited by Tilman CB., 2025) are as follows. Early syphilis

1. Primary syphilis and stage I syphilis (primary syphilis) occur 10 to 90 days after infection occurs. The first lesions are red macules or papules that then become red papules turns an ulcer (chancre), with a hard border, the base of the ulcer is usually red and painless to palpation.

2. Syphilis is secondary and occurs after 6 – 8 weeks since stage I syphilis. In some cases, the C status is often still accompanied by Primary Syphilis (SI). In stage II syphilis it begins with symptoms consistent with anorexia, fever, arthralgia, angina. In this season abnormalities the skin, hair, mucous membranes of the mouth and genitalia, clear and internal lymph nodes.

3. Early latent syphilis as clinical symptoms are not visible, but the results of serological tests for syphilis are positive. The tests that continue are VDRL and TPHA.

4. Advanced Syphilis. On physical examination, stage I syphilis scars may be found on genitalia or macular atrophy of the old papules' stage II syphilis. Syphilis precooked is grouped into 3 classifications they are:

a. Primary syphilis (stage I) lasting 3 weeks

b. Secondary syphilis (stage II) lasting time at 2-12 weeks

c. Early Latent syphilis lasting < 1 year.

d. Advanced syphilis is grouped into 4 classifications are:

e. Late latent syphilis lasting > 1 year.

f. Tertiary syphilis (stage III) lasting from 1 to 49 years.

g. Cardiovascular syphilis lasting 10-30 years.

h. Neurosyphilis lasting > 2-20 years.

Treponema pallidum enters easily through intimate contact with mucous membranes or through the eroded skin, quickly reaching the lymphatic organs and blood. After the incubation period, the primary lesion or cancer appears at the site of entry, consisting of an ulceration with intense infiltrate of mononuclear cells with lymphocytes, plasma cells and macrophages. In the secondary, there are lesions on the skin or mucous membranes, usually ulcerative and with abundant treponema. In late or tertiary syphilis, the lesions are of a destructive type, in some cases there is a fibrotic reaction with thickening of the meninges, meningovascular damage and often damages the cranial nerves, atrophying the optic nerve, the spinal cord can also be compromised. It is possible to present the case that granulomatous lesions end in areas of destruction by gum-like necrosis, in any part of the body, with a predilection for mucocutaneous areas, liver, bones, and testicle.

Treatment for syphilis is usually done with injections of Penicillin Benz Attina. Also known as Benzamacril, which should be indicated by the general practitioner, insect ologist or gynecologist – obstetrician, in the case of pregnant women diagnosed with syphilis. The duration of treatment, as well as the number of injections, may vary according to the stage of evolution of the disease and symptoms presented. When the wound that does not heal and does not hurt is still present, it is enough to take 1 dose of Penicillin to cure syphilis, but when it comes to secondary or tertiary syphilis, up to 3 doses may be necessary. The injections are applied in the gluteal region once a week, according to medical advice, however when it comes to tertiary syphilis or neurosyphilis it is necessary to be admitted to hospital, because it is a more advanced disease and has other complications involved. Ceftriaxone 1g injection for 10 to 14 days.

Face for Disease	Recommended Treatment	Alternatively, treatments
A syphilis primary and secondary	Unit doze of Benzamacril	Doxycycline 100 mg, 2 x for day per 15 days
The syphilis latent recenter	1 Unit injection of benzamacril	Doxycycline 100 mg, 2 x for one day per 15 days
A syphilis latent lately	1 injection de benzamacril per week's, duration of 3 weeks	Doxycycline 100 mg, 2 x for one day plus 30 days.
A syphilis tertiary	1 injection de Benzamacril per week is, duration 3 weeks.	Doxycycline 100 mg, 2 x for one day plus 30 days. .
Neurosyphilis	Injection of Penicillin crystalline per 14 days	Injection of Ceftriaxone 1g for 10 -14 days

After the injection of penicillin, it is common for a reaction causing fever, muscle pain, headache, heartbeat rapid heart rate, low breathing, and drop in blood pressure. These symptoms Can remain for 12 to 24 hours and should only be treated with acetaminophen, according to the health protocol cited by (Tilman CB., 2025).

Research Methodology

We use the research method is quantitative, descriptive, probability sampling technique, simple random sampling with simple random method. The

population consists of students from the general secondary school and 69 samples. Technical data collection is the questionnaire instrument. We used to collect with the questionnaire and analyze using the SPSS (Statistical Package for the Social Sciences) computer program version 24 as the univariate analysis test and bivariate analysis cited by (Tilman CB., 2025).

Results

The Primary and Secondary Syphilis

No	Classed	Groups	Women	Men	Total	%
1	10th grade	Natural Sciences	105	71	176	17
		Social Sciences	99	96	195	19
2	11th grade	Natural Sciences	101	87	188	18
		Social Sciences	55	57	112	11
3	12th grade	Natural Sciences	134	101	224	22
		Social Sciences	64	75	139	13
Total			Stage of Disease	Recommending Treatment	Alternative Treatment	Primary, Secondary Syphilis

Based on table 4.2, the student has qualified in ESG. Railaco Ermera in 2024, is as follows in the 10th grade class / CT with a total of 176 of the students and with (17%), 10th grade class / CHS with a total of 195 of the students and with (19%), 11th grade class / CT with a total of 188 students and with (18%), 11th grade class / CHS with a total of 112 students and with (11%), 12th grade / CT class, with a total of 224 students and with (22%), and in the 12th grade / CHS class with a total of 139 students and with (13%). The Conclusion shows that ESG exists. Railaco Ermera in 2024, the students who are placed in the school are the majority of the 12th grade / CT class with total of 224 and with (22%) based on the survey result, 2024.

Neurosyphilis Guide of Treatment Standards.

Single dose of benzamacril	Doxycycline 100 mg, 2 times daily for 15 days.	Recent latent syphilis
1 single injection of benzamacril	Doxycycline 100 mg, 2 times daily for 15 days.	Late latent syphilis
1 injection of benzamacril per week for 3 weeks.	Doxycycline 100 mg, 2 times daily for 30 days.	Tertiary syphilis
1 injection of benzamacril per week for 3 weeks.	Doxycycline 100 mg, 2 times daily for 30 days.	Neurosyphilis

Class

Injection of Crystalline Pennillion for 14 days	Ceftriaxone 1g injection for 10 to 14 days.	%
14-18	28	41
19-22	41	59
Naked	Class	Class

99

Woman	Man	Total
%	1	Year 10
Natural Sciences	105	71
176	17	41
Total	Social Sciences	99

The 57 of students' attendance on **Understanding Syphilis prevention in ESG. Nicolau Lobato, Dili in 2024.**

96	195	19
2	Year 11	Natural Sciences
101	87	188
18	29	42
Social Sciences	55	57

139

112	11	3
Year 12	Natural Sciences	134
101	224	22
Positively	26	Social Sciences
64	75	139

28

13	Total	%
Negative	Stage of Disease	Recommending Treatment
Alternative Treatment	Primary and Secondary Syphilis	49
Good	Single dose of benzamacril	Doxycycline 100 mg, 2 times daily for 15 days.
Recent latent syphilis	1 single injection of benzamacril	Doxycycline 100 mg, 2 times daily for 15 days.

The Bivariate data analysis and correlation test results-oriented

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Late latent syphilis

		Doxycycline 100 mg, 2 times daily for 30 days.	Tertiary syphilis
1 injection of benzamacril per week for 3 weeks.	Doxycycline 100 mg, 2 times daily for 30 days.	Neurosyphilis	.743**
	Injection of Crystalline Pennillion for 14 days		%
	28	41	19-22
41	59	Naked**	Class
	Sig. (2-tailed)	<.001	
	Total	%	1

Year 10

The result of the Pearson Correlation statistical test analysis with the significant value P value 0.001, which indicated the value 0.001 less than the value 0.05 means, is has a significant relationship between knowledge of knowledge and Syphilis prevention, with the result of correlation value with the value r = 0.743, which locates between 0.60 – 0.799 category of strong correlation with relation is positive (+).

Application

Natural science

		71	176
17	41	Total	- Social Sciences**
	Sig. (2-tailed)		96
	19	2	Year 11
Natural Sciences	101	87**	188
	29	42	
	57	69	69

The result of Pearson Correlation statistical test analysis with the significant value P value 0.001 indicates is the value 0.001 minus, the value 0.05 means is having significant relationship between understanding and prevention of syphilis with the result of the value correlation with the value r = 0.720, which locates between 0.60 – 0.799 category of sufficient correlation with the ratio is positive (+).

Total

		11	
		Year 12	Natural Sciences
134	101	224	22**
	26		64
	139	69	69
13	Total	%**	Less
	487	1,034	
	Good	Sex	Frequency

The result of Pearson Correlation statistical test analysis that the significant value P value 0.001 indicates is the value 0.001 menus, the value 0.05 means is has a significant relationship between syphilis application and prevention with the result of correlation value with the value r = 0.753, which locates between 0.60 – 0.799 category sufficient with positive (+) ratio.

.Correlation is significant at the 0.01 level (2-tailed). **Attitude and Prevention.

| | | Man | |
		ATI-TUDED (X2)	PREVEN-TION (Y)
41	Pearson Correlation	41	59**
	69		.743
	Acts	69	%
PRE-VENTION (Y)	28	41**	19-22
	59	Total	
	Sig. (2-tailed)	<,001	69

**. Correlation is significant at the 0.01 level (2-tailed).

The result of the Pearson Correlation statistical verification analysis that the significant value P value 0.001 indicates is the value 0.001 less than the value 0.05 means is has a significant relationship between Attitude and Syphilis Prevention with result with the result of the correlation value with the value r = 0.743 which locates between 0.60 – 0.799 category of sufficient correlation with the ratio of positive (+) cited by (Tilman CB., 2025).

%		Less B	7 T	Conclusions
1	(Constant)	-.441	<.00 1	
	49	Good	28	41
	69	.672	Sig. (2-tailed)	Between significant relation
	Applications	Less	7	10
	Enough	.698	001<0,05	Between significant relation

Significant test value F = 0.000 R value = .757a R value quire = .573

The result of the Linear Regression analysis indicates is the value strength correlation R = 0.757 which sampled is has positive relationship between level of knowledge by information-packed to, understanding, application and attitude of the students with the prevention of syphilis with the category of most strong correlation. And the value of the R Quire = 0.573 indicates is the level of knowledge with the value 57.3% and with the rest of 42.7% has a relation of the other variables that do not make the research are analysis, synthesis and evaluation. The result of the F test with the significant value 0.000>0.05 means is the level of knowledge of knowing. Understanding, Application, and Attitude has to Relate to and Prevention of Syphilis.

The beta value of knowledge has 0.698 can justice is the variable refers to has a positive relationship of Syphilis prevention, while sampled is the knowledge 69.8% and the rest of 30, % has a relation of the other variable that does not due to the research are analysis, synthesis and evaluation.

The beta value of understanding 0.672 can justify is the value refers to has a positive relationship of syphilis prevention, while a sample is understanding has 67.8% and the rest of 32.2% has a relation of the other variables that have not been done to the research are analysis, synthesis and evaluation.

The beta value of application 0.717 can justify is the variable refers to has a positive relationship with syphilis prevention, while a sample is the variable of application 71.7% and the rest 28.3% has a relation of the other variables that do not do to the research are analysis, synthesis and evaluation.

The beta value of Attitude 0.698 can justify is the variable refers to has a positive relationship of syphilis prevention, while, sampled is the attitude variable 6.98%, cited by (Tilman CB., 2025).

Discussion

The first hypothesis test result is based on Table 4.5. indicates is the significant value of test correlation knowledge of knowing less than 0.05 (0.000<0.05) are H0 not accepted of knowledge (X1) has a significant relationship of syphilis prevention.

The second hypothesis test result is based on Table 4.5. Indicates is the significant value of test correlation knowledge of comprehension less than 0.05 (0.000<0.05) are H0 not accepted of comprehension (X2) has significant relationship of syphilis prevention.

The third hypothesis test result is based on Table 4.5. indicates is the significant value of test correlation application knowledge less than 0.05 (0.000<0.05) are H0 not accepted of understanding (X3) has significant relationship of syphilis prevention.

The fourth hypothesis test result is based on Table 4.5. indicates is the significant value of attitude correlation test less than 0.05(0.000<0.05) are H0 not accepted of attitude (X4) has a significant relationship of syphilis prevention cited by (Tilman CB., 2025).

Conclusion

The results of the research are carried out on the students' knowledge of the relationship with syphilis prevention in ESG. Railaco Ermera, in 2025 is:

Students' knowledge of syphilis prevention with a sufficient category 49%, comprised with a sufficient category 48%, application with a sufficient category 52% and Attitude also with a sufficient category 50%.

Regarding the knowledge of students with syphilis prevention with test results, Pearson Correlation statistical with sufficient category with a value r = 0.743 and significantly P value 0.001 < 0.05 that H0 is not accepted. Comprehension is related to syphilis prevention with Pearson Correlation statistical test results with sufficient category with value r = 0.720 and significantly P value 0.001 < 0.05 that H0 is not accepted. Application is related to syphilis prevention with Pearson Correlation statistical test results with sufficient category with value r = 0.753 and significantly P value 0.001 < 0.05 that H0 is not accepted. And Attitude Application is related to syphilis prevention with Pearson Correlation statistical test results in the sufficient category with value r = 0.743 and significantly P value 0.001 < 0.05 that H0 is not accepted.

The results of the linear regression analysis show that the value of the correlation strength R = 0.757 and that there is a positive relationship between the level of knowledge, knowledge, understanding, applications and attitude of the students with syphilis prevention who are categorized the correlation is stronger. And R value X Quire = 0.573 show the level of knowledge with the value = 57.3% and the rest of 42.7% is related to other variables that do not do the research are analysis, synthesis and evaluation according to the statistical analysis result cited by (Tilman CB., 2025).

References:

1. Ademola, L. (2021). The level of knowledge of adolescents about the dangers of disease Sex-

ually transmitted syphilis in SMAN 1 Utama. Journal of Health Saints, 4 (1).

2. Alexandra, N. C. (2019). The situation of syphilis in Brazil is worrisome despite the easy diagnosis.

3. Adriana, L.I (2022). Homosexual level of knowledge about oral manifestations Syphilis in Gaya Nusantara Organization Surabaya in 2019 (Doctoral dissertation) Universitas Airlangga.

4. Bowelled, S.C., Sunlounge, J.S.V., &; Hamel, R. (2018). The relationship of knowledge and attitudes of nurses with the implementation of patient health (patient safety Room of inpatient Liun Kandace Hospital Year. Journal of nursing, 1 (1).

5. CDC, 2017. Centers for control and Prevention Sexually Transmitted Diseases (STDs).

6. Couto, L.A.A. Problematization of syphilis in the context of a family health strategy: an intervention project.

7. Da Silva Marques, V.G.P., da Silva Carvalho, G., de Moraes Miranda, L.V., Andrade, É. W.O.F., & da Conceição Machado, K. (2022). Assistance from Nursing in the treatment of people with syphilis Acquired.

8. Hartanti, A. (2016). Factors Associated with Syphilis Infection on Waria Transgender Population in 5 Major Indonesian Cities (Doctoral dissertation, Thesis, University of Indonesia).

9. Javanna, B.L. (2021). Analysis of the disease, taking into account the diagnostic criteria of the subtypes of the disease, in addition to characterizing the main ones related to the pathology and exemplifying possible diagnoses and treatments of syphilis.

10. Rocher, A.L. (2018). Acquired syphilis reinfection: analysis of the data from Porto Alegre – 2013 to 2017.

11. Lasagabaster, M.A., & Guerra, L.O. (2019). The World Health Organization (WHO) publishes new estimates on congenital syphilis.

12. Ottaviani, d. A. (2017). Descriptive study of risk factors for syphilis transmission in adolescents at Girya Lontara PKBI Clinic (Family Planning Association) Indonesia) Yogyakarta 2017 (Doctoral dissertation, STIKES Bethesda Yakum Yogyakarta).

13. Ramos, Ana Cristina dos Santos. Analysis of the epidemiological profile of syphilis from 2015 to 2020 in the Municipality of Fortaleza – CE (Doctoral dissertation), Brazil.

14. Tatoli National Agency of Timor-Leste.https://tatoli.tl/2022/08/08/ms-hakarak-kombate-transmisaun-moras-sifilis-hosi-inan-ba-oan/. Accessed on the 27th of January 2023.

15. Tilman CB., et at., (2022. The Epidemiological Dengue Hemorrhagic Fever in Timor-Leste, https://www.scivision.pub.com. Researchers article publication.

16. Tilman CB., (2024). Evaluation on National Immunization Program in the context of Timor-Leste. (Books), http://www.ajmcrr.books.com

17. World Health Organization. Guidelines for the Management of Sexually Transmitted Infection. WHO. 2012. P39-46.

18. World Health Organization. 2019. Global Incidence and prevalence of sleeted curable sexually transmitted infections.

19. WHO. Syphilis.2020.https://www.who.int/data/gho/data/themonth/topicdetails/GHO/data-on-syphilis.

20. World Health Organization. 2019. Sexually Transmitted Infections (STIS). Access on February 04, 2023.