

Description of The Community's Level of Knowledge About Efforts to Prevent The Transmission of COVID-19 in Sub-Village Nanacura Municipality of Lautem Timor Leste (2022)

Ns. Teresa de Jesus Vaz Cabral, MSc, Eliaberta da Costa Vinhas, Lic. Enf, Carlos Boavida Tilman MPH. Ph.D., Alexandra Maria Pires, M.Enf., Joaquim Gregório Carvalho, M.Enf. João Bosco Carlos DDS, MPH*

The Team on Faculty of Medicine and Health Science in National University of Timor-Lorosae (UNTL) Dili, Timor-Leste.

*Correspondence:

João Bosco Carlos, The Faculty of Medicine and Health Sciences in National University of Timor, Lorosae (UNTL) Dili, Timor-Leste, Tel: +670 7727-0870.

Received: 04 Sep 2022; **Accepted:** 09 Oct 2022; **Published:** 15 Oct 2022

Citation: Teresa de Jesus Vaz Cabral, Eliaberta da Costa V, Tilman CB, et al. Description of The Community's Level of Knowledge About Efforts to Prevent The Transmission of COVID-19 in Sub-Village Nanacura Municipality of Lautem Timor Leste (2022). *Nur Primary Care*. 2022; 6(5): 1-5.

ABSTRACT

Introduction: COVID-19 is an acute, severe respiratory syndrome caused by the SARS II-Cov-19; corona virus transmitted between people that spread from positive patients of covid-1 virus through contact with droplets. Data from the Health Service Municipality of Lautem, total positive COVID-19 cases from 22nd of March 2020 until December of 2021 was 184 cases of morbidity and 5 cases of mortality.

Objective: to describe the level of community's knowledge about efforts to prevent the transmission of COVID-19 and to identify the level of knowledge (know, understand and apply) and to know the relationship between the level of knowledge of the community in the Nanacuro sub-village, Municipality of Lautem.

Method: descriptive quantitative with cross-sectional approximation using non probability sample with type accidental sampling and use questionnaires instrument.

Results: Based on the results of the descriptive analysis the level of community's knowledge about efforts to prevent the transmission of COVID-19 showed level of good knowledge with 41.3%, sufficient knowledge with 46.8% and less knowledge with 11.9%. In statistical test Rankpearman correlation coefficient value or Pearson (p) = 0.000 means that less than the value 0.05 and the coefficient value correlated with the value 0.680.

Conclusion: The level of knowledge (know, understanding and application) of the community on efforts to prevent the transmission of COVID-19 majority is sufficient 46.8%, unless there is a strong relationship between the level of knowledge with efforts to prevent the transmission of COVID-19.

Keywords

Knowledge, Community, Prevention of COVID-19.

Introduction

COVID-19 is an acute, severe respiratory syndrome caused by the SARS II-Cov-19. The new corona virus is similar to the family of viruses that cause severe acute respiratory syndrome corona

virus (SARS II-COVID-19) and middle east respiratory syndrome corona virus (MERS-CoV), first identified in the city of Wuhan, in the province of Hunan Hubei People's Republic China at the end of December 2019. COVID-19 is a health problem that is currently happening all over the world, and so far, it has spread to more than 200 countries in the world with the high daily increase in the number of positive cases. The emerging situation on January

30, 2020, the WHO declared the disease COVID-19 as a global public health emergency disaster and on March 11, 2020, it was considered a pandemic and epidemic contamination the virus by the tact of its worldwide spread [1].

The corona virus SARS II-COVID-19 transmits between people that spreads from positive patients of COVID-19 virus through contact with the droplets. SARS II-Cov-19 infections are not always symptomatic, and symptoms can range from mild to severe. Common symptoms are fever, cough and difficulty breathing, and there may also be other symptoms that include odynophagia (sore throat), muscle aches, loss of taste and smell, diarrhea, headache and chest pain, the elderly and people with co morbidity when infected with the COVID-19 virus are likely to have more serious conditions and cause death [2]. Knowing how to prevent the transmission of the infectious disease of COVID-19 is to comply with health protocols and a healthy lifestyle through the use of masks, washing hands with soap/antiseptic, maintaining physical and social distance, avoiding agglomerations, reducing mobility, receiving the COVID-19 vaccination, consumption of nutritious foods, regular exercise and people with co morbidities should take more restricted precautions, including taking medication on a regular basis [3].

Timor-Leste is one of the countries affected by COVID-19. The first case of COVID-19 in Timor-Leste occurred on March 21, 2020 with a patient of a foreign citizen traveling internationally. The virus also spread rapidly throughout the entire area of Timor-Leste with the number of cases increasing daily, so that on 21 September 2021 the confirmed positive cases of COVID-19 were 19,206 cases and with 108 deaths [4]. The confirmed cases of COVID-19 in Timor-Leste according to the face book page of Palacio da Cinzas in December 2021 were detected 19,833 cases, 122 deaths and in the Municipality of Lautem with confirmed cases 178 people with 5 deaths. According to the information reported by the coordinator of the Mitigation of the COVID-19 Outbreak of the Municipality of Lautem in February 2022, medical doctor Mericio de Castelo stated that the COVID-19 outbreak happened for the first time in the Municipality of Lautem on the 22nd of February. March 2020 with the case imported from the Municipality of Dili [5]. The total number of positive COVID-19 cases in the Municipality of Lautem from March 22, 2020 to December 2021 was 184 cases with 5 deaths [6]. According to the data reported in the mentioned background above, we think it is important to write about “description of the level of knowledge of the community about efforts to prevent the transmission of COVID-19 in the sub-village of Nanacuro in the Municipality of Lautem Timor-Leste, 2022”.

Objectives

- To describe the community's level of knowledge about efforts to prevent the transmission of COVID-19 in the village of Nanacuro in the Municipality of Lautem Timor-Leste, 2022.
- To identify the level of knowledge (know, understand and apply) and to know the relationship between the level of knowledge of the community.

Theoretical Framework

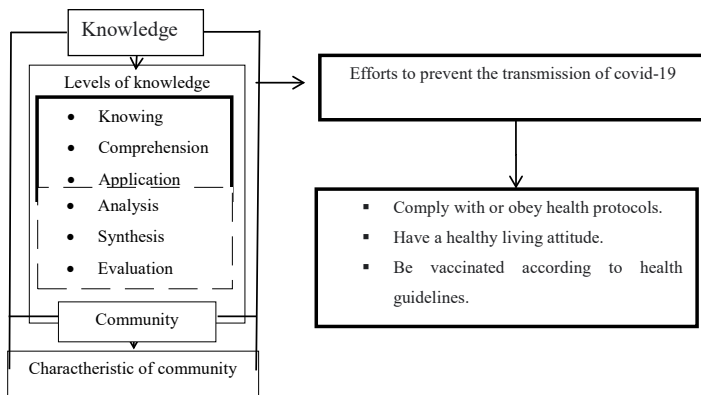
Knowledge is the result of knowing; this happens after people make the perception of a particular or common object. Detection takes place through the human senses, ice the senses of sight, hearing, smell, taste and touch. Most human knowledge is acquired by the eyes and ears. Knowledge is influenced by several factors, such as level of education, service, experience, age, environment, socio-cultural, including non-formal education [7]. Knowledge is closely related to education, where it is expected that with a high level of education, a person will have more knowledge. However, the increase in knowledge is absolutely not obtained only through formal education but can be presented through non-formal education. The knowledge level in the cognitive domain is composed of 6 levels [8,9].

- Knowing “know” is defined as an ability to remember material that has been studied previously. Included in this level of knowledge are remembering (remembering) something specific and all material stimuli or received.
- Comprehension is defined as the ability to explain correctly about a known object, and can interpret the material correctly.
- Application is defined as the ability to use material that has been studied in real (actually) situations.
- Analysis is the ability to describe a material or an object in components, but still within an organizational structure, and still related to each other.
- Synthesis is referring to an ability to put or connect parts into a new whole. In other words, synthesis is a way of skillfully developing new formulations from new recommendations.
- Evaluation says that in relation to the ability to justify the evaluation of a material or object. These assessments are based on self-determined criteria, or using existing criteria. A person's knowledge can be interpreted using a qualitative scale. Good with the result 76 % - 100 %, Sufficient with the result 56 % - 75 % and Lack of knowledge with the result < 56 %.

Community comes from the Latin language “socius” meaning “friend. The term community comes from the Arabic language “Shirk” means to participate. Community/society is a group of people who live together and interact with each other. Community is people who have lived, worked together, produce culture and have a common area, identity, habits, traditions, attitudes and feelings of unity. The characteristic of the community consists of: interaction between community members, occupy territory with certain limits, depend on each other, have certain customs or culture and have a common identity.

COVID-19 disease is a severe acute respiratory infectious disease caused by the SARS II-CoV-19 virus. Most people infected with the virus will develop mild to moderate acute respiratory illness and recover without needing special treatment. However, some will become seriously ill and will require medical attention. The elderly and those with underlying medical conditions such as cardiovascular disease, diabetes, chronic illness or cancer are more likely to develop serious illness. Anyone can get this disease and become very sick or even die at any age. COVID-19 is an

infectious disease that is transmitted between humans, caused by a new type of corona virus. The virus is transmitted through droplets (liquid) through contact with people who are positive for the COVID-19 virus and contact with objects contaminated with the virus. Incubation period is the period from exposure to the virus until the onset of symptoms. It usually lasts 4 to 14 days, at which point a person can be infectious (able to transmit the virus even without symptoms). In general, to determine the diagnosis of COVID-19, there are two types of tests that can be performed, such as swap test or real time reverse-transcription polymerase chain reaction (RT-PCR) test, and rapid test (rapid antigen and rapid antibody test). The method of examination depends on which target will be examined (genetic material or viral RNA and protein). If it is necessary to know genetic material or RNA, the test will use RT-CPR. If it is known virus protein, the test performed is an antigen and antibody test [10,11]. The theoretical framework of community knowledge about efforts to prevent the transmission of COVID-19:



Note
 Search variable :
 Non-search variable :
 Switched on :

Research Methodology

This study use a descriptive quantitative method with a cross-sectional approach to view a phenomenon image of the COVID-19 outbreak that happened in the population or community, especially regarding the description of the level of knowledge of the community about efforts to prevent the transmission of COVID-19. population is generalization composed of objects/subjects that have certain quantities and characteristics and are determined [12]. The population of this research with a total of 149, to determine the sample, we used the formula of Solving. According to this formula, total samples are 109 respondents. Use Non probability samplings with accidentally sampling type. The data collection instrument was used a questionnaire/paper of questions with a total of 40 questionnaires, the questionnaire for the variable of the level of knowledge (knowing how to understand and apply) and the variable efforts. For data analysis, we will investigate or use simple descriptive statistics [13] and SPSS (Statistical Package for the Social Sciences) program version 26th.

Results

Table 1: Distribution and frequency of respondents based on age.

Age	Frequency	Percentage (%)
17–25	41	37.6%
26–45	50	45.9%
46–65	17	15.6%
>65	1	0.9%
Total	109	100 %

Table above shows respondents aged 17-25 years often 41(37.6%), 26-45 years often 50(45.9%), 46-65 often17 (15.6%) and > 65 years often one person (0.9%). Concludes that the majority of respondents aged 26 - 45 years often 50 (45.9%) and underage > 65 years often one person (0.9%), according the result of investigation (2022).

Table 2: Distribution and frequency of respondents based on education levels.

Education Levels	Frequency	Percentage (%)
Primary school	12	11.0 %
Junior high school	27	24.8 %
Senior high school	53	48.6 %
University degree	17	15.6 %
Total	109	100 %

Table above shows respondents of primary school education level with frequency 12 (11.0%), junior high school education with frequency 27 (24.8%), senior high school education with frequency 53 (48.6%) and university degree with frequency 17 (15.6%) Completed that most respondents of senior high school education level frequently 53 (48.6%) and a minority of primary education level frequently 12 (11%), base on the result investigation in (2022).

Table 3: Distribution and frequency of respondents based on sex.

Sex	Frequency	Percentage (%)
M	48	44.0 %
F	61	56.0 %
Total	109	100 %

Table above shows male respondents with frequency 48 (44.0%) and female respondents with frequency 61 (56.0%). It concludes that most respondents were females compare of males, according the result investigation (2022).

Table 4: Distribution and frequency of respondents based on profession.

Profession	Frequency	Percentage (%)
Agriculture	23	21.1 %
Unemployment	4	3.7 %
Housewife	36	33.0 %
Students	27	24.8 %
Government public servant	12	11.0 %
Self-employment	7	6.4 %
Total	109	100 %

Table above shows respondents in agricultural profession with frequency 23 (21.1%), unemployment with 4 (3.7%), housewife with 36 (33.0%), student with 27 (24.8%), government public

servant is with 12 (11.0%) and self-employment with frequency 7 (6.4%). It concludes that the majority of respondents of the profession of housewife with frequency 36 (33.0%) and minority of profession unemployment with frequency 4 (3.7%).

Table 5: Distribution and frequency of respondents based on the level of knowledge (knowing, comprehension and application) of the community.

Level of knowledge	Frequency	Percentage (%)
Good knowledge	45	41.3%
Sufficient knowledge	51	46.8%
Lack of knowledge	13	11.9%
Total	109	100 %

Table above shows that the level of knowledge (knowing, comprehension and application) of respondents about efforts to prevent the transmission of COVID-19, good knowledge often 45 (41.3%), sufficient knowledge often 51 (46.8%) and lack of knowledge with frequency 13 (11.9%). It concludes that most respondents of the level of knowledge category sufficient with frequency 51 (46.8%) and lesser lack of knowledge with frequency 13 (11.9%), according the result of investigation team (2022).

Table 6: Ddistribute and frequency of respondents based on efforts to prevent COVID-19 transmission through complying with health protocols.

Efforts to prevent transmission of COVID-19 by complying with health protocols.	Frequency	Percentage (%)
Obedience	23	21.1%
Neutral	62	56.9%
Disobedience	24	22.0%
Total	109	100 %

Table above shows that the respondents who make efforts to prevent the transmission of COVID-19 in compliance with the health protocol are 23 (21.1%), neutral 62 (56.9%) and disobey 24 (22.0%). It concludes that the majority of respondents who make efforts to prevent the transmission of COVID-19 of neutral with frequency 62 (56.9%) and minority of obey with frequency 23 (21.1%), based on result investigation team (2022).

Table 7: Distribution Transprimer test, relationship between level of knowledge and efforts to prevent the transmission of COVID-19.

Level of knowledge * efforts Cross tabulation					Corelation	
Level of knowledge	Efforts			Total	Spreaman Rank	
	Obedience	Neutral	Disobedience		Coefficient signification (p)	Coefficient correlate
Good knowledge	F 23	19	3	45	0.00	0.68
	% 51.1%	42.2%	6.7%	100%		
Sufficient knowledge	F 0	43	8	51		
	% 0.0%	84.3%	15.7%	100%		
Lack of knowledge	F 0	0	13	13		
	% 0.0%	0.0%	100.0%	100%		
Total	F 23	62	24	109		
	% 21.1%	56.9%	22.0%	100%		

Table above, it can be seen that in the cross-tabulation between the variable level of community knowledge and the variable of efforts to prevent the transmission of COVID-19, there are 45 respondents who have a good level of knowledge, of these respondents there

were 23 people who obey to the health protocol, 19 people neutral 3 people disobeys the health protocol. 51 respondents of a sufficient level of knowledge category, there were 0, 43 neutral people and 8 people disobey the health protocol. There were 13 respondents still lacking the level of knowledge, and they are disobeying. Based on table 4.8 above, it shows that the value of the significant coefficient or Pearson (p) = 0.000 means that less than the value 0.05 and the correlation coefficient value with the value 0.680 which it interprets with the correlation coefficient table Transprimer belongs in the strong category between the value 0.60-0.79. It means that providing evidence there is a strong relationship between the level of community knowledge and efforts to prevent the transmission of COVID-19. The result of another study also showed that there was a significant relationship between the level of knowledge and behavior to prevent the transmission of COVID-19 with a significant coefficient or p:0.038, r:269, concludes that knowledge is sufficient, then behavior prevention of the transmission of COVID-19 will be sufficient [9]. Another study says that the best effort or only effort to prevent the transmission of the infectious disease of COVID-19 is through complying or obeying health protocols, having a healthy life attitude and being vaccinated according to health guidelines [14].

Conclusion

Based on the result, the relationship between the level of community knowledge about efforts to prevent the transmission of the infectious disease of COVID-19 in the village of Nanacuro, in the Municipality of Lautem Timor-Leste, shows the value of the significant coefficient (p):0.00 means lower than which value 0.05 and correlation coefficient value 0.68 which it interprets with the correlation coefficient table transprimer belongs in the strong category between value 0.60-0.79. concludes that it means there is a strong relationship between the level of community knowledge and efforts to prevent the transmission of the infectious disease of COVID-19.

References

1. Algami E. Covid-19 Prevention Documentation and Library Service SDB/Fund Centro São Paulo-SP. 2020.
2. Juliid H. Level of Knowledge About Covid-19 and Community Behavior During the New Normal Period in East Pogoing Village in 2020. 2020.
3. China Post Group Corporation Limited. Handbook for Covid-19 Prevention and Control. 2020.
4. Ministry of Health Timor Leste. Timor-Leste/Covid-19 Updates as on 30th December 2021 10.00hrs access on facebook page Palacio Cinzasup date. 2021.
5. WHO. An Outbreak of Corona Virus Diseases 2019 COVID-19 A situational reports-118 Timor- Leste. 2021.
6. Health Service of Lautem Municipality. Serviço em Saúde do Município de Lautem. Sources interview coordinator of Mitigation of the Covid-19 Outbreak of the Municipality of Lautem. 2022.

-
7. Carlos Boavida Tilman, Joao Soares Martins, Manuel Mausiry, et al. The Perception of Population and Health Professionals regarding the National immunization Program of Timor-Leste. *Health Systems and Policy Research*. 2020; 7: 2.
 8. <http://repository.stikesnhm.ac.id/id/eprint/930/1/%2816%29%2017142010035-2021-MANUSKRIP.pdf>
 9. <http://repository.stikes-bhm.ac.id/1046/1/19032022.pdf>
 10. Prandial Chandra, Sharmila Roy. Diagnostic Strategies for COVID-19 and other Corona virus Centre for Advanced Research King George's Medical University Lucknow India. 2020.
 11. Joseph T. International Pulmonologist's Consensus on Covid-19 2nd Edition page 10 India Amrita Institute of Medical Sciences Kochi Kerala. 2020.
 12. Mastro I, Nauru Angite T. Health Research Methodology Edition 1 Ministry of Health of the Republic of Indonesia. 2018.
 13. Vilelas J. Research the process of knowledge construction. Lisboa edições Sílabo. 2009.
 14. Greice Madeleine Ikea do Carmo. Epidemiological Surveillance Guide Public Health Emergency of National Importance Due to Corona virus Disease 2019- Version 3 India. Ministry of Health Surveillance Secretariat. 2021.