ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun251

Use of Statistical Data and the Quality of Data for Dengue Disease Interventions at Comoro Health Centre, Dom Aleixo Post Administrative, Dili Municipality

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Publication Date: 2025/06/14

Abstract: Dengue Hemorrhagic Fever, caused by the Flavivirus, affects people of all ages and is linked to community behavior and environmental factors. Effective strategies, community involvement, and a data-based plan are needed. The study aims to find out the use of Statistical Data and the Quality of Data for Dengue Disease Interventions at the Comoro Health Centre, Dom Aleixo Post Administrative, Dili Municipality.

This study utilized a quantitative descriptive design with a cross-sectional approach to analyze data quality, statistical variables, and Dengue disease intervention among 29 respondents in the Comoro Health Centre, Dom-Aleixo Administrative Post, Dili Municipality, in 2022.

The study found that 17.2% of respondents used statistical data in the agree category for dengue intervention, while 27.6% used it in the less agree category. The majority used statistical data in the disagree category, but not in the dengue intervention. The study also found that 13.8% agreed with the quality data of the dengue intervention, while 24.1% disagreed. The study underscores the need for improved data quality in dengue intervention.

The study highlights the importance of statistical data and data quality in dengue interventions at the Comoro Health Centre. It recommends environmental management, education, community involvement, and the use of GIS and mobile reporting for surveillance.

Keywords: *Statistical Data, Quality Data, Dengue Interventions.*

How to Cite: Eliseba Borges Ximenes; Aniceto da Conceicao Pacheco; Elias Pereira Moniz; Josefa Leandra da Costa; Belarmino da Silva Pereira; Marcos Carvalho (2025) Use of Statistical Data and the Quality of Data for Dengue Disease Interventions at Comoro Health Centre, Dom Aleixo Post Administrative, Dili Municipality. *International Journal of Innovative Science and Research Technology*, 10(6), 480-487. https://doi.org/10.38124/ijisrt/25jun251

I. INTRODUCTION

Aedes mosquitoes carry the dengue virus (DENV), an arbovirus that continues to pose a serious threat to public health, particularly in tropical and subtropical areas where severe cases can have high fatality rates. (Idrus et al., 2023). Dengue virus, which belongs to the Flavivirus genus and the Flavivirus family, causes Dengue Haemorrhagic Fever (DHF). The bite of the Aedes mosquito, especially Aedes aegypti or Aedes albopictus, can spread dengue fever. Dengue fever can affect people of all ages and at any time of the year. Community behaviour and environmental factors are related to this disease. (Hurint, 2021)

The year with the highest number of dengue fever cases was 2019, as recorded worldwide. For the first time, dengue fever transmission was recorded in Afghanistan, and the entire region was affected. More than 25,000 of the 3.1 million cases recorded in the Americas alone are considered serious. Deaths from dengue fever are fewer than in previous years, although the figures are worrying. In Asia, the highest number of cases occurred in Bangladesh (101,000), Malaysia (131,000), the Philippines (420,000), and Vietnam (320,000). Dengue fever is a serious issue in Southeast Asia, as evidenced by the 67,295 deaths it caused over 40 years, out of 68,977 deaths globally. (Hurint, 2021).

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun251

Intervention is an action or effort to get involved in a difficult situation and be interested in improving and preventing, or ending the negative situation. On the other hand, intervention is an important part of health workers in terms of promotion, prevention, education, and intervention to end a disease. Therefore, strong evidence or facts about health promotion or socialization are needed to carry out a good intervention to overcome a specific disease, such as dengue fever. To intervene with Dengue disease, it is necessary to carry out early control of Aedes Aegypti mosquitoes concerning health promotion or socialisation, fumigation, use of abate, and control of the environment, to immediately intervene with the dengue disease before recording many cases of the disease.

Data is a collection of facts, ideas, or instructions stored on a medium for communication, retrieval, and processing to automatically comprehend and present the information in a way humans can understand. Raw observable facts concerning physical phenomena or economic operations are called data. To put it more precisely, data is an objective measurement of entities (people, places, things, and events) and attributes (characteristics). From the definition above, it can be determined that data is raw facts, including business transactions, that can be processed into information that can be comprehended by humans. (Inmon, 2005).

The data use system charged can support the Dengue disease combat policy by doing health promotion or socialisation, fumigation, abate to make good interventions to increase community knowledge and behaviour change as well as to develop effective guidelines for the implementation of health promotion programmes and activities or socialisation at the level of health facilities and important areas of the community, through the implementation of these programmes to ensure the process of implementing effective health promotion or socialisation sessions and can have a permanent impact on the health of the population in Timor-Leste. Through data it can be created a uniform guide and developed through consultation with the Municipal Health Service representatives and partners to better implement health promotion or socialisation activities in health facilities, public institutions, schools and communities that can contribute to the achievement of the Ministry of Health's Vision Towards a “Healthy East Timorese People in a Healthy Timor-Leste" (NHSSP II 2020-2030, 2020)

The hospital, health posts, and community health posts are the locations that civil society selects for gathering data, and they are prominently displayed across the territorial "Municipality and Administrative Posts and Suco and Sub-Village." Methods for both direct and indirect communication with health service providers at hospitals, health centers, health posts, and community health posts, health officer reports, and reports to gather primary and secondary data (NHSSP I 2011-2030, 2011).

A comprehensive information system at the national, municipal, administrative, and Suco levels is required in light of the current need for health data and information that is charged, complete, and more readily accessible. This system necessitates the collection of data using the Health Information System from the Health Post, Health Centre, to the national level. (NHSSP II 2020-2030, 2020) . High-quality data and effective data quality assessment are needed for data standardization in research data repositories. The three most widely used attributes are completeness, accuracy, and timeliness. These three attributes are some dimensions for data quality assessment. (Riyanto et al., 2020).

To intervene with dengue fever, there is a need for strong evidence, data, and quality of data because data is a basis for decision-making, reference, materials for evaluation, and quality of data as charged, complete, timely, and consistent to take serious measures against dengue fever problems. To avoid infectious diseases like dengue fever and malaria that are spread by mosquitoes, controlling mosquito populations is essential. Applying the medication Abate (larvicide) and fogging (insecticide fogging) are two methods frequently used to control mosquitoes. Although fogging works well for rapidly and extensively lowering mosquito populations, it can have detrimental effects on the environment and human health. Administering the medication Abate, on the other hand, is often more sustainable and can target the mosquito larval phase; nevertheless, it takes longer to see noticeable results and requires more planned therapy (Hidayat et al., 2024).

Current situation in each case of Dengue disease, the number of cases has always increased in our country, as there are no means of proper intervention. Municipal Health Services have implemented several strategies for dengue fever interventions in Timor-Leste. Since the end of this programme strategy, the prevention or socialisation of Dengue disease has not yet shown its good results, and intervention is needed to end the disease. In the end, better strategies, such as involving communities and local leaders, need to be implemented in the strategy for dengue fever intervention. Dengue disease interventions, such as health promotion and socialization, aim to increase community awareness, change awareness, and improve literacy. The Ministry of Health's progress in these programs has led to a shift towards healthier behaviors. However, the process has not been entirely successful due to various challenges. A new strategy for combating dengue requires a data-based plan, allowing for easy target determination of the Health Promotion or Socialization program's target. This will help create a more effective and effective approach to combating the disease.

According to data accessed by the Ministry of Health of Timor-Leste, the number of cases of Dengue is always a problem in the last three years as in 2019 the total number of cases of dengue cases was 976, in 2020 the total number of cases was 1450, in 2021 the total number of cases was 596, in addition to 2022 the total number of cases was 2.213. Based on data from the Dili Municipal Health Service (SSM) from 2019-2022, there were 2,795 cases. In 2019 were 499 cases, in 2020 were 815 cases, in 2021 were 268 cases, and in 2022 were 1.213 cases. Based on data from the Comoro Health Centre in 2019, there were 71 cases, in 2020 were 221 cases, in 2021 were 179 cases, and in 2022 were 989 cases. In addition, health workers work at the Comoro Health Centre with a total of. 101 people, comprising local doctors (32), midwifes (25), nurses

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun251

(24), dentist (2), analysers (4), farmers (7), nutrition and statistic health Information (2), assistance nurses (2), malaria assistance (1), administration (2).

According to observations of the causes of dengue at the Comoro Health Centre, the programme for dengue disease intervention is always carried out annually by Health personnel and the Ministry of Health's party through the fogging (insecticide fogging) and using medication Abate (larvicide) for risk areas, the programme is carried out based on cases registered at the Comoro Health Centre, in addition to the promotion or socialisation of health for the community. Although these programmes have been carried out, to intervene in Dengue disease, they still record high cases in the Dom Aleixo Administrative Post, especially in Comoro Health Centre, because they are conducting late or high cases of intervention, such as health promotion or socialisation, fogging (insecticide fogging) and using medication Abate (larvicide). The data entered by the Ministry of Health is always late, so the Ministry of Health makes the socialisation late and delays the distribution of fumigation, and Slaughter (abates) to the community. This situation did not lead to progress in the intervention of Dengue in the Comoro Health Centre, which will ultimately be a high case of Dengue. Research objectives to analyse the use of statistical data and the quality of data for dengue disease interventions at Comoro Health Centre, Post Administrative Dom Aleixo, Dili Municipality.

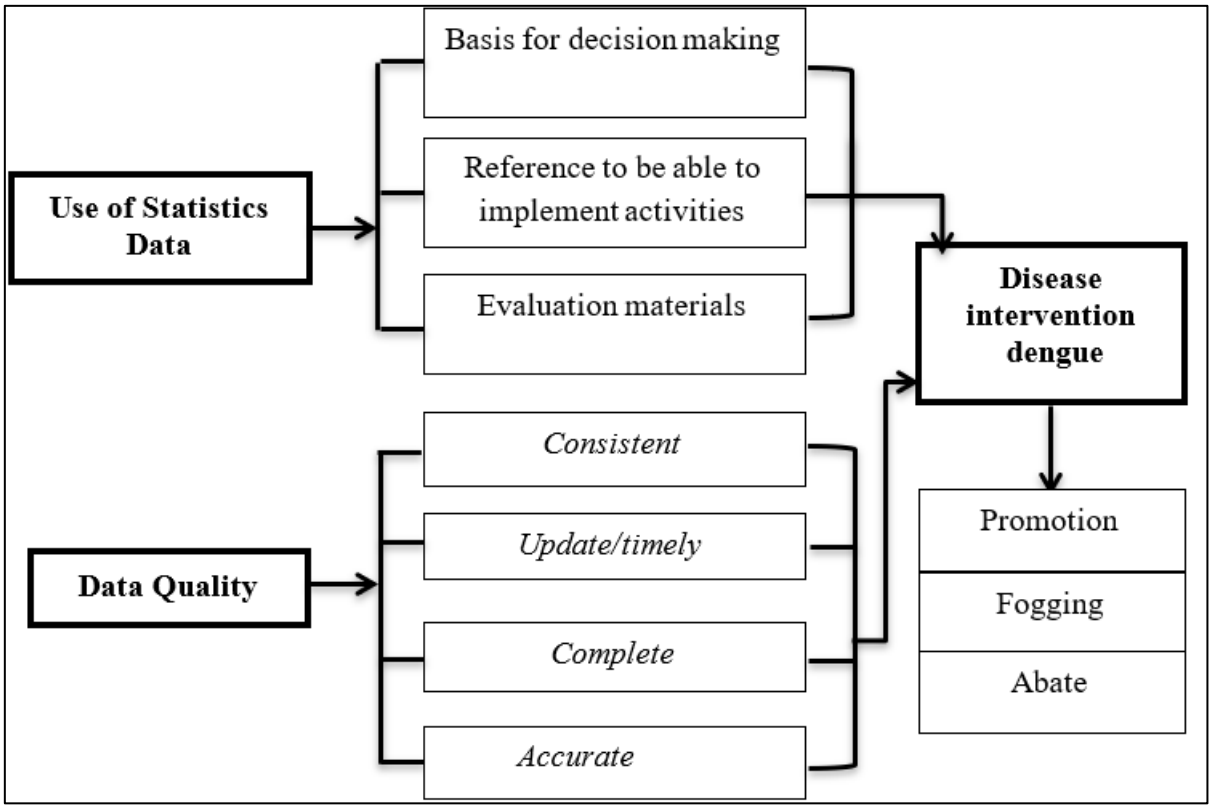

Fig 1. Theoretical framework

II. METHODS

The research design used a quantitative descriptive design with a cross-sectional approach. The purpose of this method is to analyse the statistical variable defined in this research, the use of statistical data, data quality, and the Dengue disease intervention. The sample used in this study was 29 respondents in the Comoro Health Centre, Dom-Aleixo Administrative Post, Dili Municipality, in 2022. Sampling Techniques using non-probability sampling with an accidental sampling approach. Data analysis used univariate, bivariate, and multivariate analyses, supported by application of SPSS version 22.0.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun251

III. RESULTS

Tabel 1. Descriptive of the Characteristics of Respondents at the Comoro Health Centre

No.	Respondent identity	Frequency	Persen (%)
1	**Gender**		
	Man	19	66
	Women	10	34
	Total	**29**	**100**
2	**Age**		
	24-29	10	34
	30-34	8	28
	35-40	10	34
	41-45	1	3
	Total	**29**	**100**
3	**Level Of Education**		
	Master's degree	1	3
	Bachelor's degree	23	79
	Diploma degree	5	17
	Total	**29**	**100**
4	**Marital status**		
	Married	22	76
	Single	7	24
	Total	**29**	**100**
5	**Religion**		
	Catholic	28	97
	Protestant	1	3
	Total	**29**	**100**
6	**Profession**		
	Medical doctors	6	21
	Nurses	12	41
	Midwifes	3	10
	Pharmacist	2	7
	Nutrition and Statistical Health Information	1	3
	Analyst	1	3
	Malaria assistance	1	3
	Assistance Nurses	1	3
	Dentist	1	3
	Administration	1	3
	Total	**29**	**100**

Sources: Primary data Research, year 2022

The characteristics of respondents show that the survey of 29 health personnel at the Comoro Health Centre had 66% men and 34% women. The gender shows that more men than women. The respondents' ages ranged from 34% aged 24-29 years, 28% aged 30-34 years, 34% aged 35-40 years, and 3% aged 41-45 years. The study reveals that the majority of respondents have a Bachelor's degree, with 79% having a Master's degree, and 17% having a Diploma I-III. Additionally, 76% of respondents are married, with 24% being single. The data indicates a higher education level among respondents. The data indicates that 97% of respondents identify as Catholic, while only 3% identify as Christian, indicating a higher percentage of Catholics. The study found that 29 Health personnel at Comoro Health Centre, 21% of medical doctors and 41% of nurses and 10% of midwives, 7% of Pharmacists, 3% of nutrition and statistical health information and 3% of analyst, 5% of Malaria assistance 3% of Nursing Assistant, 3% of Dentists, and 3% Administration staff. Therefore, the data for the profession shows that the general nursing and medical professions are more common than other professions.

- *Use of Statistics Data*

The following will be explained about the distribution analysis of the results of the Use of Statistics data consists of data as a basis for decision making, data as a reference, and data as a subject of evaluation with dengue disease intervention in the form of the following tables:

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun251

Table 2. Use of Statistical Data for Dengue Disease Interventions

Use of Statistics data	Dengue Disease Intervention			Total	*P= Value*
	Agree	Less agree	Disagree		
Basis for decision making					
Agree	5 (17.2%)	10 (34.5%)	5 (17.2%)	20 (69.0%)	
Less agree	0 (0%)	3 (10.3%)	4 (13.8%)	7 (24.1%)	0.405
Disagree	0 (0%)	1 (3.4%)	1 (3.4%)	2 (6.9%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	
Data as a reference					
Agree	4 (13.8%)	7 (24.1%)	4 (13.8%)	15 (51.7%)	
Less agree	0 (0%)	4 (13.8%)	2 (6.9%)	6 (20.7%)	0.500
Disagree	1 (3.4%)	3 (10.3%)	4 (13.8%)	8 (27.6%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	
Data as a subject of evaluation					
Agree	5 (17.2%)	11 (37.9%)	4 (13.8%)	20 (69.0%)	
Less agree	0 (0%)	3 (10.3%)	4 (13.8%)	7 (24.1%)	0.085
Disagree	0 (0%)	0 (0%)	2 (6.9%)	2 (6.9%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	

Sources: Primary data Research, year 2022

This study analyzed data as a basis for decision-making in 29 respondents related to the dengue fever intervention. Respondents who agreed to use statistical data as a basis for decision-making for dengue fever intervention were 17.2%. Respondents who agreed to use statistical data as a reference for dengue fever intervention were 13.8%. Respondents who agreed to use statistical data as an evaluation subject for dengue fever intervention were 17.2%.

Table 3. The Data Quality for Dengue Disease Interventions

Data Quality	Dengue Intervention			Total	*P=Value*
	Agree	Less Agree	Don't Agree		
Accurately					
Agree	2 (6.9%)	5 (17.2%)	2 (6.9%)	9 (31.0%)	
Less agree	3 (10.3%)	9 (31.0%)	5 (17.2%)	17 (58.6%)	0.163
Don't Agree	0 (0%)	0 (0%)	3 (10.3%)	3 (10.3%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	
Completely					
Agree	4 (13.8%)	7 (24.1%)	1 (3.4%)	12 (41.4%)	
Less agree	1 (3.4%)	7 (24.1%)	5 (17.2%)	13 (44.8%)	0.012
Don't Agree	0 (0%)	0 (0%)	4 (13.8%)	4 (13.8%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	
Timely					
Agree	3 (10.3%)	6 (20.7%)	3 (10.3%)	12 (41.4%)	
Less agree	1 (3.4%)	5 (17.2%)	4 (13.8%)	10 (34.5%)	0.851
Don't Agree	1 (3.4%)	3 (10.3%)	3 (10.3%)	7 (24.1%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	
Consistent					
Agree	2 (6.9%)	10 (34.5%)	2 (6.9%)	14 (48.3%)	
Less agree	2 (6.9%)	4 (13.8%)	5 (17.2%)	11 (37.9%)	0.093
Don't Agree	1 (3.4%)	0 (0%)	3 (10.3%)	4 (13.8%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	

Sources: Primary data Research, year 2022

This study analysed Data Quality as a dengue intervention. Respondents who agreed that Data Quality is accurate for the dengue intervention were 6.9%. Respondents who agreed that Data Quality is a complete intervention were 13.8%. Respondents who agreed that Data Quality is Timely for dengue intervention were 10.3%. Respondents who agreed that Data Quality is Consistent for the dengue intervention were 10.3%. The results suggest that dengue intervention is a complex issue that requires careful consideration and implementation.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun251

Table 4. Use of Statistical and Data Quality for Dengue Intervention

Variable	Dengue Intervention			Total	*P=Value*
	Agree	Less Agree	Disagree		
Use of Statistical Data					
Agree	5 (17.2%)	8 (27.6%)	2 (6.9%)	15 (51.7%)	
Less Agree	0 (0%)	5 (17.2%)	2 (6.9%)	7 (24.1%)	0.006
Disagree	0 (0%)	1 (3.4%)	6 (20.7%)	7(24.1%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	
Data Quality					0.013
Agree	4 (13.8%)	7 (24.1%)	1 (3.4%)	12 (41.1%)	
Less Agree	0 (0%)	6 (20.7%)	3 (10.3%)	9 (31.0%)	
Disagree	1 (3.4%)	1 (3.4%)	6 (20.7%)	8 (27.6%)	
Total	**5 (17.2%)**	**14 (48.3%)**	**10 (34.5%)**	**29 (100%)**	

Sources: Primary data Research, year 2022

The results showed that 17.2% of respondents used statistical data in the agree category and dengue intervention with the agree category. However, 27.6% used it in the less agree category, 6.9% in the disagree category, and 0% in the less agree category. The majority of respondents used statistical data in the less agree category, but not in the dengue intervention, with the disagree category. Other respondents used statistical data in the disagree category but not in the dengue intervention with the disagree category. The percentage of respondents who used statistical data in the disagree category was 20.7%.

The study found that 13.8% of respondents agreed with the quality of dengue intervention data, while 24.1% disagreed with the dengue intervention. 3.4% disagreed with the dengue intervention, and 0% disagreed. 20.7% disagreed with the dengue intervention, while 10.3% disagreed. 3.4% disagreed with the dengue intervention, and 20.7% disagreed with the dengue intervention. The quality of dengue intervention data varied among respondents, with some agreeing with dengue intervention and others disagreeing. The study highlights the need to improve data quality in dengue intervention.

Table 6. Multivariate Analysis for the Use of Statistical Data and Data Quality for Dengue Disease Intervention

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632[a]	.399	.353	.572

a. *Predictors: (Constant), Data Quality, Use of Statistical Data*

The results of the multivariate analysis of variables use of statistical data and data quality for dengue disease intervention show that the contribution of the correlation coefficient to the calculation is R Square 0.399 x 100% = 39.9%, therefore, the results show that the contribution of the use of statistical data and the quality of data to dengue disease interventions was 39.9% and the remaining 60.1% which was contributed by other factors.

IV. DISCUSSION

➢ *Use of Statistical Data for Dengue Disease Intervention*

Increasing the capacity to provide quality, timely, and reliable data is one of the targets of the SDGs, especially in small island states like Timor-Leste. The presentation of the data is intended to make the data more accessible for readers to understand and interpret. (Carvalho et al., 2024). Data has a variety of functions and benefits, such as the basis for decisions, data as a reference to be able to implement certain activities, and data such as evaluation. The data can be used and decisions made that are appropriate to the problem. With decisions that are easy to make and are accountable. As a basis for planning. To plan, it is necessary to make parameters and mechanisms for the implementation of the plan. With this data, we can calculate the future conditions so that the process can be followed and the effectiveness achieved (Peter H. Rossi, Mark W. Lipsey, 2018).

Data is something that is understood or believed since it pertains to things that are known or suspected. Please keep in mind that there is proof that what has occurred is true. Information about any event or emotion can be found in data. Aggregate information can also be evaluated. Data can be information or values derived from observations made during specific experiments, and it might take the shape of numbers, symbols, or attributes. (Iraza & Nasution, 2023).

The study found that respondents who agreed with the use of statistical data for dengue intervention amounted to 17.2%, and disagreed with the use of statistical data in dengue intervention amounted to 24.1%. According to the research findings based on the use of statistical data for dengue disease interventions at the Comoro Health Centre, there is a significant influence on the use of statistical data on dengue disease interventions. Therefore, based on researchers' observations during research at the Comoro Community Health Center, health workers or the Statistics Health Information department did not use statistical data to carry out disease interventions; they only used Excel to enter data to be used as documents.

According to the first research results name Angga Eko Pratono (2018) Inputted health information system data at Gondokusuman II community health center, Yogyakarta city (2018) With the results of his research it was shown that the

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun251

Health Information System should use the same data for the information system so that the data can be passed through social identity to the patient so that it can be placed in clinical data.

In relation to the results of the first researchers compared to the results of the research there is a difference because the first research results show that the health information system should use the same data for the information system so that the data can be passed through social identity to the patient so that it can be placed in clinical data but based on the results the research now shows that there is a significant influence on the use of statistical data for the intervention of dengue disease with value *P=value 0.006* the meaning is lower than value *alpha (α=0.05)* Health personnel or the Statistic Health Information department do not use statistical data to intervene in dengue, they only use Excel to enter data to be a document for them or a file of life, therefore the data available is incomplete so that the health personnel report late data to the Ministry of Health so that the Ministry of Health makes a late and late promotion of fugetation and abatisation because the new cases have increased the number of health personnel after planning for dengue intervention programmes.

- *Data Quality for Dengue Disease Intervention*

Data quality is defined by Mark Mosley as the degree to which the data is accurate, complete, timely, and consistent with all business regulatory requirements. (Supono, 2013). Improving the quality of health data is critical for effective clinical decision-making and for evaluating health programs. Ensuring the quality of health data presents a significant challenge in public health. The development of information systems in the health sector is progressing rapidly, and the need for data management in all health organizations is increasing. (Pereira et al., 2025).

The study found that respondents who agreed with the quality of data for DHF intervention amounted to 13.8%, and disagreed with the quality of data for DHF intervention amounted to 20.7%. According to the research findings based on Quality Data on dengue disease interventions at Comoro Health Centre, there is a significant influence on quality data on dengue disease interventions with value *P=value* 0.013 The meaning is lower than value *P=value* 0.05 therefore based on the researchers' observations during the research at the Comoro Health Centre it was found that the health staff or the Statistic Health Information department did not put the importance of the quality of the data which was a fact of the problems, the data that was not charged, incomplete, not updated on time and was not consistent.

According to the first research from (Listyorini, 2018), Assessment of the quality of routine data for the Dengue Hemorrhagic Fever prevention and control program at the Surakarta City Health Department Research findings show that the defendants through 2SD (not well), completed the report every month and each Health Post had 100% complete, the reporting time per month was 81,4% Internal consistency is not well and external consistency is well.

To the results of the first researchers compared to the results of the research now there are several because the results of the first research show that the defendants were more than 2SD (not well), The full monthly report and each Health Post is 100% full, the reporting time per month is 81,4 % Internal consistency Is not good and consistent but based on the research results it is now shown that there is a significant influence on quality data on the intervention of dengue disease *P=value* 0.013 the meaning is lower than value *P=value* 0,05 Therefore, the Comoro Health Centre has done an intervention on dengue fever but has not reached 100% because it continues to register high cases in the Dom Aleixo Administrative Post especially at the Comoro Health Centre because the data is not charged, incomplete, not updated on time and is not consistent so that the programme for dengue fever intervention is not going well to register high cases annually.

- *Use of Data Statistics and Quality Data for Dengue Disease intervention at Comoro Health Centre, Dom Aleixo Post Administrative, Municipality of Dili in 2022.*

Data is a recording instrument of instructions and means of processing and transmission, which are automatically displayed as information that people can understand (Inmon, 2005). As well as data as facts, and observations of events that are formed with important numbers and symbols. The data has several functions and benefits, such as the basis for decision-making, a reference for implementing some activities, such as evaluation materials. According to (Mosle, 2008)The definition of data quality is the level of data that states the accuracy of the data accurately, completely, timely consistently according to the relevant needs.

The study found that the contribution of the use of statistical data and the quality of data to dengue disease interventions was 39.9%, and the remaining 60.1% was caused by other factors. The hypothesis test then shows that it is worth it at *alpha (α=0.05),* there is a significant influence on the use of statistical data and the quality of data for dengue disease interventions at the Comoro Health Centre. Compared with the study from (Pacheco et al., 2024), found that basic sanitation through moderate health promotion for Dengue prevention in Dom-Aleixo, Administrative Post of the Municipality of Dili, revealed a substantial association with a very high correlation. Intervention is an action or effort to engage in difficult situations and have an interest with the aim of improving and preventing or ending any negative situation from happening. On the other hand, intervention is an important part of health professionals in the means of promotion, prevention, education, and intervention to end a disease (KBBI, 2007). Therefore, to carry out good interventions, there is strong evidence or fact about the promotion or socialisation of health to combat a disease as specific as the dengue disease.

To intervene with Dengue disease, it is necessary to check the Aedes Aegypti milk in advance about health promotion, Watering fugging, use abatization and control as well as the environment that lives, to intervene this in one way only the case of the disease. Sanitation is an effort to monitor a variety of physical environment aspects to prevent the

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/25jun251

spread of human illnesses, particularly those that have a detrimental influence on human life, health, or physical development. (Pacheco et al., 2025).

V. CONCLUSION

The study found that a significant influence of the use of statistical data and data quality for dengue interventions at the Comoro Health Centre. The study suggests environmental management such as cleaning wastewater in flower pots and gutters, cleaning water tanks regularly, organizing communities to clean the environment in public places, educating communities about the spread of dengue and how to prevent it, involving schools, local community leaders, and the media, encouraging surveillance teams to set up local surveillance teams for dengue behavior and mosquito response, using GIS and mobile reporting.

➢ *Ethics of Research*

Stated by the head of the Comoros health centre, No. ID 7653-8 This research was conducted from 16-30 August 2022, at the Comoro Health Centre.

REFERENCES

[1]. Carvalho, M., Ximenes, L., & Exposto, L. A. S. M. (2024). Access to Public Available Health Data and Knowledge of Health Indicators Among Students at the Faculty of Public Health in Timor-Leste. *Asian Journal of Health and Science*, *3*(11), 308–317.

[2]. Hidayat, M. T., Pradana, D. S., Rozy, M. F., & Setyaji, I. D. (2024). *Strategi Efektif Dalam Pengendalian Nyamuk , Fogging Dan Pemberian Obat Abate*. *2*, 8–13.

[3]. Hurint, A. S. (2021). Analisis Masalah Demam Berdarah Dengue di Kabupaten Magetan Provinsi Jawa Timur. *Jurnal Kesehatan Global*, *4*(2), 92–102. https://doi.org/10.33085/jkg.v4i2.4832

[4]. Idrus, N. L., Jamalid, S. M., Bakar, A. A., Embong, H., & Ahmad, N. S. (2023). Comparison of clinical and laboratory characteristics between severe and non-severe dengue in paediatrics. *PLoS Neglected Tropical Diseases*, *2023-Decem*, 1–10. https://doi.org/10.1371/journal.pntd.0011839

[5]. Inmon, W. H. (2005). *Building the Data Warehouse, 4th Ed* (Reprint). Wiley India Pvt. Limited, 2005.

[6]. Iraza, K., & Nasution, M. I. P. (2023). Meningkatkan Daya Saing Bisnis: Peran Data Dalam Pengambilan Keputusan. *Journal Sains …*, *1*(2), 888–894.

[7]. Listyorini, P. I. (2018). Penilaian Kualitas Data Rutin Program Pencegahan Demam Berdarah Dengue. *Infokes*, *8*(1), 6–15. https://ojs.udb.ac.id/index.php/infokes/article/view/189/163

[8]. Mosle, M. (2008). *The DAMA Dictionary of Data Management*. Technics Publications, LLC14 Elm StDenvilleNJUnited States.

[9]. NHSSP I 2011-2030. (2011). *National Health Sector Strategy Plan I 2011-2030*.

[10]. NHSSP II 2020-2030. (2020). *National Health Sector Strategy Plan II 2020-2030*.

[11]. Pacheco, C., Carvalho, M., & Fatima, T. E. (2025). Improving Basic Sanitation Focus on House Conditions, Clean Water, and Toilets in Dom Aleixo Post Administrative, Dili City, Timor-Leste, 2024. *Asian Journal of Healthy and Science*, *4*(4), 165–173.

[12]. Pacheco, C., Lino, M. N., & Tilman, C. B. (2024). Family characteristics , Basic Sanitation trought Health promotion moderating in prevention Dengue in Dom Alexo , Dili 2024. *Asian Journal of Healthy and Science*, *3*(10), 278–289.

[13]. Pereira, E. D. C., Ximenes, L., & Pires, C. M. (2025). Analysis of Secondary Data Utilization for Hypertension Prevention in Maubara Community Health Centre , Liquiça Municipality. *International Journal of Scientific Multidisciplinary Research (IJSMR)*, *3*(4), 607–616.

[14]. Peter H. Rossi, Mark W. Lipsey, G. T. H. (2018). *Evaluation: A Systematic Approach Peter* (8th ed.). SAGE Publications Ltd.

[15]. Riyanto, S., Marlina, E., Subagyo, H., Triasih, H., & Yaman, A. (2020). Metode Penilaian Kualitas Data Sebagai Rekomendasi Sistem Repositori Ilmiah Nasional. *Baca: Jurnal Dokumentasi Dan Informasi*, *41*(1), 11. https://doi.org/10.14203/j.baca.v41i1.544

[16]. Supono. (2013). *Kualitas Data*. Binus University.