

System Readiness for the Implementation of Maternal and Child Health Services during COVID-19 Pandemic in Comoro Community Health Center, Dili Timor-Leste

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ABSTRACT

Background: Maternal and child health is an important element in improving the welfare of mothers, infants and children to achieve Timor-Leste's public health goals. Mother and child services can use the Six Building Blocks service system from the World Health Organization. This study aimed to look at the readiness of the Maternal and Child Health (MCH) service delivery system during the COVID-19 period at the Comoro Health Center.

Subjects and Method: A cross-sectional study was conducted at the Comoro Community Health Center, Dili City in November 2021. A total of 94 health workers including doctors, midwives and nurses working in the Maternal and Child Health (MCH) sector, pharmacy technicians working in pharmacy units, laboratory technicians working in laboratory units were selected for this study. The dependent variable was progress in achieving maternal and child health service indicators. The independent variables were provision of health services, availability of health workers, health information system (technology), availability of essential medicines and health products, finance, and leadership/leadership. The data were collected by using questionnaire. The data were analyzed using Chi-Square.

Results: Maternal and child health service readiness were associated with health service delivery (OR= 2.97; 95% CI= 1.23-7.16; p=0.014), availability of health workers (OR= 3.44; 95% CI= 1.28-9.25; p=0.012), availability of essential medicine (OR= 1.40; 95% CI= 0.55-3.58; p=0.048). Maternal and child health service readiness were associated with availability of information communication & technologies (OR=2.32; 95% CI= 0.91-5.90; p=0.073), availability of finance (OR= 2.62; 95% CI= 1.06-6.47; p=0.034), and leadership (OR= 1.43 95% CI= 0.60-3.40; p=0.419), but they were not statistically significant.

Conclusion: Maternal and child health service readiness are associated with health service delivery, availability of health workers, availability of essential medicine, availability of information communication & technologies, availability of finance and leadership.

Keywords: maternal and child health, health system and COVID-19.

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BACKGROUND

As mentioned that the coronavirus disease 2019 (COVID-19) was spread rapidly in the world. So that, the WHO declared to all country that a global pandemic in March of 2020 (Perry et al., 2021). Maternal and child health is an essential element in improving the well-being of mothers, infants and children in order to achieve the health goals of the people of Timor-Leste. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities and health care systems. The objective of the Maternal, Infant, and Child Health topic area discusses various conditions, health behaviors, and health care system indicators that affect the health, well-being, and quality of life of women, children, and families.

The health service system, especially facilities and human resources during the COVID-19 pandemic, is at the forefront of case management efforts. Describes the health system as all activities whose main purpose is to promote, restore or maintain an equitable health system to society. The WHO explains that the health system includes all organizations, people, and actions (activities) aimed at promoting, preventing illness and restoring public health (WHO, 2010). Clinic Health Center as primary health care facilities have been the spearhead of health services in Timor-Leste. During the COVID-19 pandemic, Clinic Health Center as health service providers that prioritize preventive and promote efforts are required to play a role in preventing and handling COVID-19, (Kemenkes RI, 2020), Optimal promote and preventive efforts can help handle COVID-19 by slowing the incidence rate of transmission

from human to human (Respati, 2020). Other side mentioned that majority of health worker, example nurses experienced that have psychological effects post provided caring to the patient with Covid-19 in Timor-Leste (Soares et al., 2022).

The role of Clinic Health Center needs to be strengthened in terms of prevention, detection and response according to their authority as first-level health care facilities. On the other hand, the Clinic Health Center has the task and function of organizing Community Health Efforts (UKM) and Individual Health Efforts (UKP) to fulfill minimum service standards for the community which should not be abandoned even during a pandemic (Kemenkes RI, 2020), In addition, the special roles of Clinic Health Center during the COVID-19 pandemic include adjusting the SME program plan and relocating Clinic Health Center resources (Respati, 2020).

The technical implementation of UKM in Clinic Health Center should be reviewed whether they can still be carried out as usual, carried out with different methods or techniques, postponed, or cannot be implemented at all, of course with due observance of the rules of Infection Prevention and Control (PPI) and physical distancing in order to break the chain of transmission (Respati, 2020).

Maternal and child health services are part of family health services in SMEs organized by Clinic Health Center with the main target being pregnant women, infants, and toddlers. During the COVID-19 pandemic, there are several activities in maternal and child health services that must be carried out, namely the first and third trimester pregnancy checks, normal deliveries in non-COVID-

19 cases, routine and postpartum family planning services, first postpartum visits, and neonatal services. essential and KN1 and immunization. Activities that can be postponed are routine pregnancy check-ups and ultrasound and Doppler examinations for mothers with confirmed COVID-19.

MCH service efforts carried out at the Clinic Health Center are that mothers who are exposed to COVID-19 will be treated in service places that are more focused on intensive care on the preparation of mothers to give birth to babies and also so as not to contract COVID-19 to other mothers (Politica, 2020). Maternal health services carried out in the year before the COVID-19 pandemic from January to December 2019 at SSM Dili recorded ANC visits K1: 1,044, K4: 7,216, deliveries 10,286 live births and post-natal visits: 4,401, while during the pandemic period from January to December 2020 recorded ANC visits K1: 13,192 and K4: 6,653 deliveries: 10,040 live births and post-natal visits: 4,233 (Politica, 2020). The Comoro Health Center reported in 2019 the coverage of ANC visits K1: 6,281, K4: 3,800, deliveries: 2,616 live births and post-natal: 3,261. Whereas in 2020 the coverage of ANC visits is K1: 4,972, K4: 2,107, childbirth: 2,363 live births and post-natal: 4,730 (SAÚDE & DILI, 2020).

However, the 2016 Health Demographic Survey reported the maternal mortality rate, (Maternal Mortality Ratio / MMR) reaching 218 per 100,000 live births (TDHS, 2016), of these deaths, most mothers died due to postpartum hemorrhage, eclampsia and sepsis. This report also reports 20 perinatal deaths per 1,000 pregnant women with a gestational age of 7 months or more. Infant mortality has also decreased by 30 deaths per 1,000 live births, while under-five mortality is 41 deaths per 1,000 live births (TDHS, 2016). On 31 December 2019, WHO-China was alerted for a pneumonia case of unknown

etiology in Wuhan. Since being declared a pandemic by WHO on March 11, 2020, efforts to prevent transmission and slow the rate of new infections have been the main goals of handling COVID-19 cases (Cucinotta and Vanelli, 2020). The status of the pandemic indicates that the spread of COVID-19 is very fast and wide, so that almost no country in the world is spared from the COVID-19 pandemic (Nurhalimah, 2020).

As of September 29, 2021, globally, positive confirmed cases of COVID-19 were 232,636,622 with 4,762,089 deaths (WHO, 2021) COVID-19 cases in Timor-Leste were detected on March 21, 2020 and continue to grow until now. Based on updated data accessed through the Centro Integrado de Gestão de Crise on September 29, 2021, there were 19,455 positive cases of COVID-19 in Timor Leste, with 115 deaths. The above case occurred, because the provision of MCH health services to the community was carried out irregularly in health facilities, due to a shortage of health workers, lack of use of information communication and use of health technology, lack of availability of drugs and health products and lack of financial availability and leadership in health services. mother and child. Looking at the description of the information and data above, the health of mothers and children in Timor-Leste is still in the problematic category so that researchers want to conduct research on the readiness of the system for providing Maternal and Child Health (MCH) services during the COVID-19 period at the Comoro Community Health Center. This study aimed to look at the readiness of the Maternal and Child Health (MCH) service delivery system during the COVID-19 period at the Comoro Health Center.

SUBJECTS AND METHOD

1. Study Design

The study was used a cross-sectional research design approach to explore the deeply information based on the issues. This research was carried out in November 2021 and is located in the Comoro Health Center area, Dili City.

2. Population and Sample

The target population in this study is all workers, both permanent civil servants and temporary employees who work at the Comoro Health Center totaling 123. technique sampling was carried out by means of Consecutive Sampling. Consecutive Sampling is all subjects who come and meet the selection criteria are included in the study until the required number of subjects is met. Total population of 123, the calculation of the size of the sample with the Slovin formula, obtained 99 peoples as the target of the study.

The research subjects that have been involved are professional techniques including doctors, midwives and nurses who work in Maternal and Child Health (MCH), pharmacy technicians who work in pharmacy units, laboratory technician who work in laboratories unit.

3. Study Variables

Independent Variables: Provision of health services, Availability of health workers, Health information system (technology), Availability of essential medicines and health products, Finance, and Leadership/Leadership.

Dependent Variable: Progress in achieving maternal and child health service indicators

4. Operational Definition of Variables

Provision of MCH services: Carrying out routine MCH services during the COVID-19 pandemic.

Health workers: Availability of professional midwives to serve the health of mothers and children.

Communication, information and use of technology: Availability of Information Communication and use of technology as a source of MCH information.

Essential medicines and health products: Availability of essential medicines and health products for the MCH service program at the CHC

Financial: Availability of finance at the CHC

Leadership: The leadership of the head of the Puskesmas involved health workers during the pandemic.

Mother and Child Health: Number of MCH visits at health facilities

5. Study Instrument

The instrument in this study used a questionnaire.

6. Data Analysis

Univariate analysis: conducted to determine the characteristics of the sample descriptively with a frequency distribution. Bivariate Analysis: to determine the effect between the two variables, namely the independent variable and the dependent variable without control, to assess whether the effect of the independent variable on the dependent variable is statistically significant by using the Chi-Square test with a degree of significance used is 95% and the p value with the level significance, namely the value of $p < 0.05$.

7. Research Ethics

This research was approved by the National Ethical and Technical Health Research Institution (INS-RETC) that committed and was considered at 23th September 2021 and at the time INS-RETC support with an approval letter into research.

RESULTS

In the implementation of maternal and child health services at the Comoro Health Center using the World Health Organization six building block. It was found that, there were interruptions in maternal and child health

services. While health workers, communication, information and the use of digital technology, essential medicines and health products. Other side, finance for MCH services and leadership on maternal and child health themselves were running less than optimally during the COVID-19 pandemic.

About five respondents could not be interviewed because they are being not present at the time of conducting the research activities. Based on the two analysis as Bivariate Analysis (Cross tabulation) and Multivariate Analysis (Regression Logistic) was showed various important issues, such as below table.

Table 1. Distribution characteristic of the respondent (n=94)

Characteristic	Category	Mother and child health (Y)	
		No n (%)	Yes n (%)
Gender	Male	8 (8.5)	13(13.8)
	Female	23 (24.5)	50 (53.2)
Type of work	Civil Services	9 (9.6)	19 (20.2)
	Hired Employees	12(12.8)	35 (37.2)
	Voluntary	10 (10.6)	9(9.6)
Profession	Midwives	10 (10.6)	2 (2.1)
	Doctor	3 (3.2)	10 (10.6)
	Nurses	11(11.7)	17(18.1)
	Others professional techniques	37 (39.4)	4 (4.3)
Work experience	< 5 years	21 (22.3)	32 (34)
	6 to 9 years	7 (7.4)	23 (24.5)
	> 10 years	3 (3.2)	8 (8.5)
Age	22-36 years old	28 (29.8)	57 (60.6)
	37-51 years old	1 (1.1)	6 (6.4)
	52-62 years old	2(2.1)	0 (0.0)

As many as 50 (53.2%) services during the COVID-19 pandemic were carried out by male health professionals. Judging from the employment status, 35 (37.2%) waiters are contract employees compared to permanent employees who are only 19 (20.2%), then in

terms of 41 (43.7%) were other professions and 56.3% were health professionals. Another aspect is reviewed from the age that those who performed services during the COVID-19 pandemic aged 22-36 years old were 85(90.4%).

Table 2. Results of Bivariate Analysis (cross tabulation)

Variables	Mother and Child Health		OR	p
	No n (%)	Yes n (%)		
Health Service Delivery				
No	24 (68.6)	11 (31.4)	2.96	0.014
Yes	25(42.6)	34 (57.6)		
Health Workers				
No	19(73.1)	7(26.9)	3.43	0.012
Yes	30(44.1)	38(55.9)		
Information Commu- nication & Technologies				
No	18(66.7)	9(33.3)	2.32	0.073
Yes	31(46.3)	36(53.7)		

Variables	Mother and Child Health		OR	p
	No n (%)	Yes n (%)		
Essential Medicine				
No	14(58.3)	10(41.7)	1.40	0.048
Yes	35(50.0)	35(50.0)		
Financial				
No	21 (67.7)	10(32.3)	2.62	0.034
Yes	28(44.4)	35 (55.6)		
Leadership				
No	18(36.7)	31(63.3)	1.42	0.419
Yes	13(28.9)	32(71.1)		

Based on the above table indicated that, 24 (68.6%) no Health Service Delivery for Mother and Child Health during Covid-19 pandemic.

DISCUSSION

1. Characteristic of respondent

In 94 respondents was involved in this study about 63 (67%) of which 50 (53,2%) were female stated that they continued to provide health services to mother and children (front line) at the Comoro Community health center during the COVID-19 pandemic. A total of 35 (37.2%) of those who were said to be front line were those who had the status of contact employees not civil servants. In addition, in term of professions for those who continue to provide health services to mothers and children at CHC Comoro 10 (10.6%) are doctors and 17 (18.1%) are nurses and 2 (2.1%) are midwives. According with the to the results of other studies, it shows that pregnant women and lactating mothers sometimes surrender, they trus that their healing is in the hands of God, as they see more infected health workers such as women or man (Perry et al., 2021)

2. MCH Service Delivery

Equipping maternal and child health services in the COVID-19 situation, respondents said they did not implement health services for mother and children (68.6%), beacuse some of them was exposed to COVID-19, resulting

of provision of services that are not comprehensive. Health is the basic right of every human being, the people of Timor-Leste have the right to obtain health services and medical care and the obligation to protect and advance them. According to a study on Empowering primary healthcare institutions against the COVID-19 pandemic: A health system-based approach said service delivery at PHCI must be comprehensive both in terms of care for COVID-19 and non-COVID-19 patients (Subba et al., 2021).

In the situation of the COVID-19 pandemic, the services provided at the Comoro health center and health post are that everyone who comes must get a COVID-19 rapid test check (triazem), for those who get a positive test result, then they will be referred to an isolation place and the negative ones will be followed up according to the expected goals of the patient. In addition, the organization BMC Medical Informatics and Decision Making (2016), in the article Continuum of Care Services for Maternal and Child Health using mobile technology a health system strengthening strategy in low and middle income countries in its research using health innovations should be seen as a component of a complex health system coverage, quality, equity and efficiency in achieving good health outcomes, financial

risk protection and responsiveness will ensure the strengthening of the health system (Balakrishnan et al., 2016).

Thus the services provided to everyone comprehensively especially the MCH program such as; Reproductive Health, Family Planning, ANC, MCH/Obstetrics, PNC, PMTCT, Syphilis, IMCI and Immunization both in puskesmas as well as at health posts. Good service delivery in health facilities is an important element of any health system and also as a fundamental input to the health status of the population, along with other factors, including the social determinants of health (WHO, 2010).

Services that are not carried out during COVID-19 are community-based services such as; SISCa and Family health visits (SnF). It is not according with the WHO Europe stated that it provides the best solution stating that it is necessary to dynamically implement a dual health system to ensure services simultaneously between managing the COVID-19 response to prevent, diagnose, and treat COVID-19 patients and other health workers while ensuring that important health services remain available, one of which is maternal and child services (WHO Regional Office for Europe, 2021).

These results are also in line with the statement that health officials remain mindful that babies born to asymptomatic mothers, who have no contact with people with COVID-19 or who do not exhibit classical symptoms, should be served based on clinical birth care practice techniques as previously recommended (Boeira et al., 2021).

3. Availability of health workers to MCH services during the COVID 19 pandemic

During the pandemic, health workers have become the face of the health system's response. However, a pandemic like COVID-19 with an unpredictable direction requires

health workers to work according to their profession. From the existing health workers of the midwife profession. A total of 19 (73.1%), who said they did not carry out work as a health profession regularly because they were exposed to the SARS-COV virus, COVID-19. This greatly affects the achievement of MCH indicators in puskesmas, of course, it affects the number of maternity visits so that the delivery rate decreases in 2020 only reaching (47%), while post partum/PN1 visits can reach (94%) but PN2 visits decrease to (52%), this happens due to each mother's lack of awareness of maternal and child health to revisit. Other professional techniques continue to carry out their obligations around 34 (82.9), from Most of these workers have more than 10 years of experience, namely 8 (72.7%). Said it remains in place to provide maternal and child health care. In the COVID-19 pandemic situation, many staff at the Comoro health center were exposed to COVID-19, therefore the Timor-Leste Ministry of Health suddenly recruited new employees so that the Comoro Community Health Center received a distribution of about 100 new hired employees consisting of; Doctors, Midwives, Nurses and Public Health, to be able to fill the shortage to serve every patient who comes in accordance with the program implemented by the Puskesmas. In a study conducted by Subba et al. (2021). Empowering primary healthcare institutions against COVID-19 pandemic: A health system-based approach said that in the COVID-19 pandemic situation as soon as possible the right redistribution and substitution of labor can help achieve a fair allocation of labor (Subba et al., 2021).

Health organizations, and communities are taking action to address human resources for health (HRH). There is substantial evidence that prominent innovative initiatives and actions have improved eff-

iciency in leveraging existing human resources, including team approaches to intervention delivery, multi-tasking, task sharing, and increased community engagement (Lassi et al., 2016).

The shortage of health workers can be felt from the insufficient number and mix of skills of the people trained or the improper distribution of their placements, as well as losses caused by death, retirement, career change or migration out. If the aforementioned happens, there must be a change by making a staff recruitment plan according to needs. (WHO, 2010). Issues in the labor sub-sector strengthen health systems to improve maternal, Neonatal and Child health outcomes including the number and distribution of health workers, their overall skill mix and skill set, staff productivity and the quality of care provided (Eichler, 2011).

The intended workforce includes clinical staff, such as Doctors, Midwives, Nurses, Pharmacists, and Dentists, as well as management and support staff, i.e. those who do not provide services directly but are critical to the performance of the health system, such as managers, ambulance drivers and accountants.

4. Communication, information, and the use of technology to MCH services during the COVID-19 pandemic

In this section respondents who said there was no Communication, information and use of technology about MCH (66.7%). Health information systems collect data from the health sector and other related sectors, analyze data and ensure overall quality, relevance and timeliness, and turn data into sources of information. The WHO health information system provides the basis for decision-making and has four main functions: (i) data generation, (ii) compilation, (iii) analysis and synthesis, and (iv) communication and use. Health information

systems collect data from the health sector and other related sectors, analyze data and ensure overall quality, relevance and timeliness, and turn data into information for health-related decision making (WHO, 2010).

Communication, information is very important in health facilities and communities for maternal and child health decision making for each individual. Health promotion activities are carried out through many channels in puskesmas and the community uses two-way communication, namely direct and indirect communication between individuals kelompk society in general. The methods that have been used are (1) using a mobile car to broadcast live events according to the topic of the problem or program every day in all villages and aldeia at a time when the community is all in Their respective homes, Misanlya in the afternoon after get off work and in the morning before going to the office. (2) Health promotion through television, social media radio and also using IEK materials such as; posters and brochures, so that the public is more aware of the health problems that are now faced by many people. But local awareness is still lacking, because the achievement of the MCH program indicators has not reached the expected target. Therefore, it is necessary to often advocate and promote health so that the public understands the importance of MCH and produces many people who visit puskesmas to get comprehensive MCH services from the health community. Health communication as part of governance at Puskesmas during the pandemic includes risk communication with the community, crisis communication with health workers and strategic communication with higher authorities simultaneously. Two-way active communication channels lead to joint decision-making and improvement of service quality. In the journal Family Medicine &

Primary Care says a clear and coordinated dialogue with the community is essential to prevent unnecessary risk of infection, distrust, confusion, anger and excessive health care demand (Subba et al., 2021).

5. Availability of essential medicines and health products

At the Comoro health center, health workers responded that there was no availability of essential medicines and health products for the MCH service program at this Puskesmas during the COVID-19 pandemic (58.3%). The list of essential medicines often runs out but only occurs for one week. After that, the section chiefs negotiated in order to solve the problem of drug stock outs. In addition, sometimes each health center tells each other about the medicine needed so that it is quickly answered in an emergency situation. The drugs that have occurred stock out are methyldopants and Vit K, other health products such as PPE and hand sanitizers do not occur stock out. Therefore, to ensure that there is no stock out of medicines and products Health in the future it is necessary to provide capacity building regarding the supply chain management training to staff holding pharmaceutical units. Delivery of drugs and other products among consumers must go through prescriptions rationalized by medical personnel, so that the recommended interventions can be used judiciously (Subba et al., 2021). According to WHO it is necessary to have a set of facility-level indicators to measure the main results of these structures and processes in the areas of access, product quality and rational use: (i) Access is measured by the availability and affordability of essential medicines. (ii) Quality is represented by the absence of expired stock on pharmacy shelves and adequate handling and conservation conditions. (iii) Rational use is measured by examining prescribing and administering practices and the implementation of

strategies that have been shown to support rational use, such as standard treatment guidelines and lists of essential medicines (WHO, 2010).

6. Financial availability in MCH Services during the COVID-19 Pandemic

As many as 67.7% of respondents responded that there was no financial available specifically for MCH services during the COVID-19 pandemic. According to WHO regarding health financing refers to "the functioning of the health system relating to the mobilization, accumulation and allocation of money to meet the health needs of the people, individually and collectively, in the health system, (WHO, 2010). The finances obtained from OJE government finances are allocated regularly every three months amounting to \$750.00 to meet the operational needs of institutions (Puskesmas and health service posts) such as: buy air conditioning batteries, repair windows, doors, electric light bulbs, cok electricity and others. In addition, the finances for the implementation of health programs are only for the SISCa program and COVID-19 immunization. Therefore, the government needs to allocate finances for the implementation of MCH programs so that they can be implemented in accordance with program plans, guidelines and protocols.

7. Leadership in MCH services during the COVID-19 pandemic

Strengthening the health system from the leadership point of respondents who said yes (71.1%). Strengthening is one way to ensure that system performance realizes the intermediate objectives of most national health policies, plans and strategies quality, equality, efficiency, accountability, resilience, and sustainability. The health workforce of each activity needs to monitor and evaluate the implementation of the MCH program which is carried out monthly, quarterly and

semesterly. In addition, there are coordination meetings with local authorities to discuss the implementation of effective and efficient programs to targets in the community.

A functioning health system is organized around people, institutions, and resources mandated to improve, maintain, or restore the health of a particular population. Health system strengthening refers to significant and targeted efforts to improve system performance (Kieny et al., 2017). A collective leadership approach is likely to create and sustain quality improvements (Kumar and Khiljee, 2016).

Program activities Effective coordination with various stakeholders, providing solutions to problems will strengthen MCH activities in terms of community mobilization. Integrated health system strengthening interventions can adapt locally to enable rapid expansion of coverage health services as well as dramatic improvements in population health outcomes, (Thomson et al., 2018). Leadership in the health system includes setting priorities and an overall vision and direction of the health system. Good leaders will also ensure that policies and regulations are in place for effective and secure service delivery, and that there are appropriate mechanisms in place to ensure accountability. The stewardship of the healthcare sector includes coordination between service providers, donors and other ministries (Eichler, 2011).

The variable of providing health services is a factor that affects the health of mothers and children, there are interruptions in MCH services (68.6) during the COVID-19 period. In the results of the bivariate analysis with a $p=0.250$, so that it was continued with the Regression Logistic analysis, it showed that the health service variable had a AOR = 7.35; 95% CI= 2.81 to 19.17; $p<0.001$). Availability of health workers from the existing health workers, there were midwives

(73.1%), who said they did not carry out work as a health profession on a regular basis because they were exposed to the SARS-CoV virus, COVID-19.

This greatly affects the achievement of MCH indicators. There is no communication, information and use of technology, the use of communication, information and technology about MCH in the Clinic Health Center is non-existent (66.7%), resulting in the level of awareness of the local community towards public health is still lacking, so that the achievement of the MCH program indicators has not reached the expected target. Availability of essential drugs and health products Availability of essential drugs and health products for the MCH program during the COVID-19 pandemic at this Clinic Health Center there was a stock out of essential drugs (58.3%), thus ensuring there was no stock out of drugs for MCH services.

Financial availability for MCH services There is no financial availability for MCH services during the COVID-19 Pandemic, (67.7%), so it can affect MCH. Leadership, there is strengthening of the health system from the point of view of leadership with presentation (71.1%). This variable functions properly, so that MCH is carried out in accordance with the national health plan, strategy, quality, equity, efficiency, accountability, resilience and sustainability.

AUTHOR CONTRIBUTION

Agusta Amaral Lopes as the main researcher, looking for topics and processing data, Delfim da C. Ferreira as a first provider of suggestions and input, Valente da Silva as data analysis, Domingos Soares as editing and process of publication article, Nelson Martins as a second provider of suggestions, input and the process of publication article.

CONFLICT OF INTEREST

The authors no any conflict of interest during conducting this study.

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