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ANALYSIS OF CST (CASE, SUPPORT AND TREATMENT) AT H ABDUL MANAP HOSPITAL IN JAMBI CITY IN 2018

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ABSTRACT

Background: *The CST clinic of H. Abdul Manap, the regional public hospital is the only type-C a hospital which provides ARV (Anti Retro Viral) treatment service in Jambi City. However, in the past five years, the trend of CST clinic utilization has tended to decrease. This research aims to analyze the factors affecting the decrease in the utilization of the CST clinic of H. Abdul Manap regional public hospital, Jambi City.*
Method: *This study was used the qualitative method with purposive sampling technique. This research conducted in 37 participants were employed to obtain the primary data sources from observation and in-depth interviews with key informants. Those key informants included the management team (3 people), CST Clinic team (7 people), PLWHAs (18 people) and peer counselors (8 people) as well as FGDs (Focus Group Discussions).*
Results: *The commitment of the concerned stakeholders, especially the chairman of the hospital and the CST team members in administering the CST service, has not been maximum. The budget allocation for CST clinic in the hospital was only for and limited to staff incentives. There had been no position for team leaders and case managers, while the doctors and staffs had not received any CST training. Some staffs even served double jobs.*
Conclusion: *The service SOP, as well as the scheduled and continuous monitoring on SOP implementation and progress evaluation according to CST Clinic performance indicators, are required. The necessary of regional policies related to CST service, especially for the provision of CD4 reagents and tariffs; and the hospital director's decree to instruct not to refuse to treat PLWHA are also required. The Implication is a strong commitment from all stakeholders, especially the chairman of the hospital and the CST team members are required to improve the clinic utilization.*

Keywords: *Analysis, Service System, CST Clinic*

INTRODUCTION

HIV is transmitted through blood and body fluids [1] and is an immunodeficiency virus that binds to the surface of CD4 cells and infects healthy cells [2]. According to UNAIDS (2016), it is estimated that there are 36.7 million people with HIV [3]. By proclaiming Fast Track 90.90.90, it is estimated that, in 2027, 90% of People Living with HIV/AIDS or PLWHA will know their HIV status, 90% of PLWHA will be on ARVs, and 90% of PLWHA will have undetectable Viral Load [4].

In 2017, HIV cases in Indonesia infected 280,263 people [5]. In Jambi Province, there are 930 HIV/AIDS cases, with the largest proportion case in Jambi City, amounting to 74% or 687 people [6]. CST Clinic is a Care, Support, and Treatment for PLWA and the increase in HIV cases has an impact on the need for CST service. The implementation of the HIV/AIDS Control Program in Indonesia has grown with the addition of a very significant number of ARV service [7]. According to 2017 data from

SIHA (HIV and AIDS Information System) under the Ministry of Health of the Republic of Indonesia, there were 890 active CST clinics, consisting of 641 CST Clinics (hosts) and 249 satellite referral hospitals. Jambi City has 7 CST services, 5 of which are in the Community Health Centers, and two clinics are in the hospitals. One of them in H Abdul Manap Regional Public Hospital as the second level of PLWHA referral hospital since 2012.

The CST Clinic of H. Abdul Manap Regional Public Hospital is the only type-C hospital which provides ARV (Anti Retro Viral) treatment service in Jambi City. However, in the past five years, the trend of CST clinic utilization has tended to decrease. At the end of 2018, only 16 PLHWA accessed the clinic, meaning only 20% of the total PLHWA had accessed the ARV at the CST Clinic of H. Abdul Manap Regional Public Hospital.

Research by Mujiati, et al., (2012) stated that the number of CST service and coverages sharply increase. Nevertheless, generally, various problems still exist on CST services, including the expensive costs for diagnosis and opportunistic infection therapy. Most PLWHA and families have to bear these costs. On the other hand, Temesvari (2014) states that the HIV voluntary counseling test in the Community Health Center in East Jakarta is not conducted due to the lack of VCT implementation in the community, the awareness of key components, and the recording and reporting mechanisms [8].

As of October 2017, the Department of Heath of Jambi Province recorded PLWHA on ARV, amounting to 465 people (55% of the total PLWHA). As many as 375 of them were in Jambi City and only 16 of them (2.3%) accessed the CST Clinic of H. Abdul Manap Regional Public Hospital. The others were spread in the other CST Clinics in Jambi Province. The remaining 45% had not been on ARVs and would contribute to the increasing number of new HIV cases because virus replication and high virulence will increase the HIV transfer process without ARVs. Early administration of ARV can reduce HIV infection by 93% in non-HIV sexual partners (serodiscordant couples). The Prevention efforts by using ARVs are part of Treatment as Prevention (TasP) [9].

The decrease in the number of visits to CST Clinic at H. Abdul Manap Regional Public Hospital in the past five years has encouraged the researchers to analyze the factors affecting the decrease in the utilization of the CST Clinic by analyzing the service system evaluation [10].

METHODS

The research was conducted from January to April 2019 by using a qualitative design [11]. The informants were determined by purposive sampling technique and by a direct determination that referred to the principle of appropriateness and adequacy. There was a total of 37 informants employed to obtain primary data from observations, in-depth interviews with key informants, consisting of three members of hospital management team, namely the director, the head of medical services, the head of medical support; seven members of CST clinic team, namely the chairman, the doctor in charge, the nurse, the counselor, two pharmacy staff, laboratory staff, and last recording and reporting staff. The next group consisted of 18 PLWHA who accessed the CST service (including four people who had moved to another CST clinic) and the last group consisted of eight peer counselors from NGO Kanti Sehati in Jambi City.

In addition, two FGDs were conducted, i.e., one FGD with the management and CST teams, and one FGD with the counselors. The secondary data were obtained from the documents, such as patient cards, PLWHA counseling cards, CST service indicators, SOPs, SIHA data, patient medical records, CST clinic monitoring and evaluation report data, hospital profile, annual reports, hospital strategic plan (*renstra*), and the internal regulations of H Abdul Manap Regional Public Hospital. To improve data validity and reliability, the triangulation of sources involving the management, medical practitioners, and service users (PLWHA and counselors) was conducted. The triangulation methods were conducted

on the observation, in-depth interviews, FGD, and document review [12]. This research was conducted after obtaining the approval letter on the request for data retrieval from the director of H. Abdul Manap Regional Public Hospital, Jambi City, dated 1 December 2018 number:800/1903/TU.2/RSUD/XII/2018

RESULTS

The CST Clinic of H. Abdul Manap Regional Public Hospital is designated as a reference for PLWHA with a second level category based on the Regulation of the Minister of Health No. 451 of 2012. The decrease in CST service utilization in the past five years is described in Table 1 as follows:

Table 1. The Number of PLWHA in H. Abdul Manap Regional Public Hospital, Jambi City 2013-2018

No	Year	Existing Patients	New Patients	Switched Access	Deceased	Fail To Follow Up	Referral	Compliance	Non Compliance	No Information
1	2013	0	15	0	2	0	0	4	5	1
2	2014	15	27	0	3	2	6	3	8	19
3	2015	10	21	1	6	2	2	3	6	18
4	2016	1	15	3	0	0	2	2	5	2
5	2017	15	7	5	2	0	0	2	0	3
6	2018	10	6	1	0	0	0	1	2	6

Remarks: 'fail to follow up' means that PLWHA did not visit the clinic for at least three months (3 visits)

Factors affecting the decrease in CST Clinic Visits: Hospital Internal Factors

a. Fund

Before 2017, the Funding for CST services at H. Abdul Manap Regional Public Hospital was obtained from the Global Fund for employee incentives, purchase of the reagents, consumables, and ARVs. On the other hand, the fund for opportunistic infections was obtained from the hospital BLUD (Regional Public Service Agency) funds. After the Global Fund funding was stopped, there were no more subsidies for PLWHA (including JKN participants), the cost of providing CD4 reagents, and employee incentives from the organization. The following is the interview quote from Informant 1:

"The funding for the provision of ARV drugs from the Regional Department of Health and Provincial Department of Health concerning the facilities can be budgeted according to the unit plan. Meanwhile, BPJS does not cover HIV cases. There is a program for that from the Global Fund" (Informant 1)

b. Human Resources

The analysis results of Human Resources are explained in Table 2 as follows**:**

Table 2. The Analysis Results of Human Resources in CST Clinic of H. Abdul Manap Regional Public Hospital, Jambi City

NO	Position	Competency	Implementation of Supervision	Issues	Expectation	Recommendation
1.	CST Chairman	Not according to the standards	Not implemented	No CST training	Job certainty as a chairman	Revision of the Decree to change the name of the head of CST team
2.	CST doctor	Not according to the standards	Not maximal	No CST training	The internist doctor is responsible for CST, there is guidance from the management	Conduct CST training, form a CST service monitoring team
3.	CST nurse	According to the standards	Not optimal	Double Job as head of nursing	There is regeneration, incentives for CST staffs as what has been done when Global Fund involved	Conduct cadre regeneration of CST nurses, allocate CST staff incentives, analyze nurse workload
4.	HIV counselor nurse	According to the standards	Not optimal	Double Job as a pediatric nurse	There is regeneration, VCT/CST training refresh	Add VCT and CST counselors, nurse competence refresh
5.	CST recording and reporting staff	According to the standards	Not optimal	Lack of staffs, head of medical records	There is regeneration, provide incentives for the CST staffs	Conduct cadre regeneration of CST nurses allocate staff incentives, workload analysis on medical record staffs
6.	Laboratory staff	According to the standards	Optimally implemented	CD4 Cartridge is expired	Regulations regarding the provision of CD4 cartridge	Advocacy by Management to Local Government in order to obtain the CD4 reagent budget
7.	Pharmacy staff	Not according to the standards	-	New staff, no CST training	Conduct CST training	Immediately conduct CST Training, internal policies related to the transfer of program staffs is needed
8.	Case manager			There are no staff yet		Immediately appoint a case manager

c. *Infrastructures and Facilities*

Table 3. The Analysis Results of Infrastructure and Facilities in CST Clinic of H. Abdul Manap Regional Public Hospital, Jambi City

	Infrastructures and Facilities	Available	Incomplete	Remarks
1.	Nameplate	√		It is jointly VCT/CST -
2.	Special room for counseling (with two doors on different sides), separated from the examination room	√		
3.	Comfortable patient seats and counselor desks	√		New procurement in December 2018
4.	Filing cabinets, suggestion boxes, tissues, trash bins, condoms, drinking water, notebooks, and reference cards,			There is no suggestion box yet
5.	Teaching props and educational aids for patients to explain how to install condoms, use protective equipment for post-exposure and so on, IEC (Educational Information Communication) materials in the form of brochures, leaflets, books	√	√	
6.	Tools for documenting the patient's condition and the counseling process (record form and protocol in accordance with CST requirements)			The un-updated edition of KIE (Educational Information Communication) materials in the form of brochures, leaflets
7.	Medical staff room: desk chair, stethoscope, tensimeter, condom, IEC on HIV/AIDS, scales			
			√	There is no form of medication compliance yet
8.	Sufficient ventilation and light			
			√	The un-updated edition of KIE (Educational Information Communication) materials
			√	

d. Policies

The HIV policies are listed in Table 4 as follows:

Table 4. The Analysis Result of CST Clinic Service Policies

No	Policy Number	Concern	Document	Issues
1.	Decree of the Department of Health No. 832 of 2006	Standard service for PLWHA referral hospitals	N/A	The SOP is not yet complete, implementation is not yet maximal, HR is not yet in line with the standard hospital for the second level category
2.	Decree of the Department of Health RI No. 451 of 2012	Designation of H. Abdul Manap Regional Public Hospital as a PLWHA referral hospital	N/A	The SOP is not yet complete, implementation is not yet maximal, HR is not yet in line with the standard hospital for the second level category
3.	Regulation of the Department of Health No. 71 of 2013	Provision of ARVs by the Government	N/A	-
4.	Regulation of BPJS Director No. 01 of 2015	Funding for PLWHA under JKN	N/A	The CST management and clinic do not yet know the procedure for funding CST clinics through JKN

The hospital director's decree to instruct not to refuse to treat PLWHA is not available [13].

e. Procedure

There are 28 fixed procedures of CST clinic services set forth on the Director's Decree since it began operating. The Decree was last updated in December 2018 before the hospital accreditation. The results of the SOP research are summarized in Table 5 as follows:

Table 5. Analysis Results of SOP in CST Clinic

No	SOP in CST Clinic	Description	Solution
1.	SOP document	Incomplete (SOP drug side effects monitoring,	Form a special SOP preparation team
2.	SOP socialization and training	Rarely conducted	Periodic schedule of SOP socialization and training
3.	SOP implementation	Not running well	Periodic monitoring and evaluation of SOP implementation
4.	Monitoring and evaluating the implementation of SOPs	Not available	Form a monitoring and evaluation team
5.	The availability of SOP in CST room	Available	

Factors Affecting the Decrease in CST Clinic Visits: PLWHA Internal Factors

a. Education

The average educational level of PLWHAs who access CST service at H Abdul Manap Regional Public Hospital is explained in Table 6 as follows:

Table 6. Educational Level of PLWHAs at CST Clinic

No	Educational Level	Number	Percentage
1	Uneducated	1	6%
2	Elementary school	1	6%
3	Junior High School	2	11%
4	Senior High school	10	56%
5	Diploma	2	11%
6	Bachelor	2	11%
	Total	18	

Source: Analysis of Medical Record Documents at H. Abdul Manap Regional Public Hospital

b. Knowledge

The comprehensive knowledge assessment was based on the MDG indicators answered correctly in the form of the following five questions, as follows: The use of condoms to prevent HIV transmission, loyalty to one sex partner can prevent HIV transmission, the use of shared eating utensils do not transmit HIV, mosquito bites do not transmit HIV, and PLWHA cannot be recognized only by physical appearance.

According to the observations to and interviews with 18 PLWHA, on average, their knowledge of basic HIV was sufficient. However, more specific knowledge such as the information on breastfeeding substitution with formula milk for infants with HIV positive mothers was still lacking. There were two PLWHA with babies. Thus, the HIV-infected mothers should know how to take care and provide appropriate baby food to prevent vertical HIV transmission from mother to baby in line with the research by Roxby et al [14]. The following is a quote from an interview with PLWHA:

"*.... I did not know that it is better not to give breastmilk... I have fed and remain to breastfeed my baby...".* (Informant 11b)

c. Income

The income of PLHWA who visited the CST clinic is described in Table 7 as follows:

Table 7. The Income Data of PLHWA who visit the CST Clinic

No	Total Income	Number	Percentage
1	≤ 1 million	3	17%
2	1-2.7 million	5	28%
3	≥ 2.7 million	10	56%
	Total	18	

There was 45% of PLWHA who visited CST clinic with income under minimum basic salary standard. Therefore, they expected that their National Health Insurance (JKN) could be used to access free CST service.

d. Service Tariff Rates

Since the funding from Global Fund was stopped in early 2017, the PLWHA had to pay a ticket to access CST service for IDR35,000 (thirty-five thousand rupiahs), which was the most expensive tariff in Jambi City. Most PLWHA expressed their objections (52%) although 48% did not. The funding for treatment and medication of PLWHA in hospital for JKN participants was in accordance with the INA-CBGS (Indonesia Case Base Groups) package. Thus, according to applicable JKN procedures, the hospital can claim to BPJS Kesehatan (Social Insurance Administration Organization for Health) as mandated in the Regulation of the Department of Health No. 59 of 2014. The following is an opinion of a peer counselor about the service tariff rate:

".....The ticket here is the most expensive in Jambi City. We refer those who are not able to afford to other cheaper, even free facilities. The PLWHA must pay thirty-five thousand rupiahs per visit. Before 2017, it was free". (Informant 12)

e. Geographic Accessibility

More than 50% of PLWHA who accessed CST service lived near the hospital. One obstacle that caused medication discipline was the distance or the time required to reach medical service. A similar study in Myanmar by Aye et all (2017) stated that among 16% of those who were not disciplined in implementing ARV treatment were mostly because of the far distance between the medical service and their houses (17.7%) [15]. However, there are also PLHWA who chose H. Abdul Manap Regional Public Hospital because it was indeed far away to avoid meeting people they knew to keep their HIV status safe. In line with the research conducted by Markos et al. (2008), the main reason for the patients' non-compliance is a far distance [16]

f. Patient's Time Value

From the in-depth interviews, the average waiting time for PLWHA when accessing CST services was more than 2 hours, while the Regulation of the Department of Health standard set the waiting time at less than 60 minutes. The results of FGD attended by 7 PLWHA counselors and their field coordinators indicated that the long waiting time had caused the patients not recommend CST Clinic of H. Abdul Manap Regional Public Hospital, in addition to the service only available on Tuesdays and Thursdays. It was only during the FGD, were the counselors informed that the CST clinic service was open on working days since 2017. This waiting time of more than 2 hours also caused some PLWHA to move to other health facilities. The following is one quote from an interview with a PLWHA:

".... I have waited since 8 am, and I got the service at 1 pm. Even though I had much work, I had to sit there waiting for the doctor who arrived at noon, so I moved to another health facility.." (Informant 15)

g. Health Care Insurance

According to 18 PLWHAs interviewed and the identity data for PLWHA, all of them were the participants of National Health Insurance (JKN). Unfortunately, they could not use this facility to access the CST Clinic service at H. Abdul Manap Regional Public Hospital for free.

h. Peer Counselor Support

The peer counselors/assistants in Jambi City came from NGO Kanti Sehati Sejati with total members of six people. Each of them was responsible for one CST clinic. The access to meet PLWHA groups was not difficult because some of the PLWHA counselors/assistants in Jambi City were PLWHA who had

survived and was open with their status. Almost all PLWHA interviewed felt very helped by the counselors. The following is a quote of an interview:

"*... The counselors really helped us, especially for the first time when we were stated positively have HIV. It was really shocking. Fortunately,, there was this "Miss.R' who kept encouraging and said that she was a PLHWA too and got infected from her deceased husband. She was no longer embarrassed even though people knew she was PLHWA"* (Informant 1b)

Process

The ARV Treatment Counseling, TB Counseling, and positive prevention counseling processes had not gone well, the informants claimed that the CST staff were not informative. On the other hand, the CST team claimed that there had been no specific guidance and supervision from the management. The management explained that they evaluated the performance through e-performance, morning coffee session, or medical committee meetings. There was no specific time for the CST clinic, considering that there were many other priority issues needed to be resolved. The lack of feedback from the patients to staff, from staffs to supervisors, and so forth had caused the absence of follow-ups on such issues.

The quality of CST clinic services was assessed based on the interview results. Five PLHWA claimed that the clinic's service was good, while five other PLWA stated that it was moderate. Eight peer counselors stated that the service required improvement. They expected the CST staffs could be more friendly, cooperative, and more informative. In addition, they also expected that the waiting time became shorter and the JKN card could be used to access the service.

DISCUSSION

Before 2017, the funding for HIV prevention was provided by the Global Fund, while the regional government was responsible for financing the opportunistic infections. This condition is in line with the research by Milantika (2009) in Bandung which found that the local government funding support in Bandung Regency for VCT Clinic was not optimal and still depended on the Global Fund [18]. Similar condition was found by Baroya and Sulistiyani (2008) in Jember City [17] When the funding support from Global Fund stopped, the continuity funding support should be taken over by the Regional Government after the issuance of the regulation listing that HIV/AIDS prevention is included in the Minimum Service Standard (SPM) of the local government [19]. The role of local governments should be reflected in their financial commitments and local regulations. One of the indications is the budget increase for CST/VCT clinics. To realize this, advocacy from hospital management is required. The funding for PLWHA with JKN has been guaranteed (both for outpatients and hospitalized patients) through the INA-CBG package. Therefore, PLHWA should not be charged as it is the responsibility of the management to cooperate with BPJS Kesehatan to learn about the claim procedures of CST service.

The analysis of the human resources of the CST Clinic of H. Abdul Manap Regional Public Hospital indicated that both the service quantity and quality did not meet the standards. The staffs had to work on double jobs, causing them unable to function optimally. The chairman's name in the organizational structure had not revised yet, leading to the absence of the role of CST chairman as the team director. It was found that more than 50% of PLWHA were dissatisfied with the services of CST hospital staffs. It is necessary to conduct training for CST staffs, regeneration and analysis of the workload of the nurses and medical records, which caused long waiting times of 2 hours. The facilities and infrastructure of the CST Clinic of H. Abdul Manap Regional Public Hospital were in accordance with the standards of the Minister of Health. Even the issue on the available CD4 test equipment was only on the expired cartridge. The hospital needs to coordinate with the Regional Health Department and CST clinics to provide supplies and to maximize the utilization. There has to be clarity on the regional policies related

to HIV/AIDS, especially the allocation of staff incentives and CD4 reagents as well as service tariff rate regulations for CST clinical service. The CST clinic service procedure documents must be completed, a special team (one of which is the SOP compiler) should be formed to monitor and evaluate the implementation of the SOP. Therefore, organization performance will be accountable and good [20]. Mentoring shall be conducted regularly by the head of the hospital and the Health Department to gain feedback from all parties who are capable of suggesting solutions to the issues. Clinical indicators and progress evaluation are also required on a regular basis.

From the interview results, it was found that the knowledge of PLWHA was only limited to basic knowledge about HIV. Hence, it is necessary to schedule IEC (Information, Education, and Communication) sessions attended by doctors, nurses and PLHWA to share their knowledge and experience as done by Kabanjahe General Hospital (Meylia, 2009) [21].

Education is a protection mechanism for HIV transmission. PLWHA with sufficient education tend to change risk behavior and understand how to prevent disease. The research by Harahap in (2016) pointed out that the education level had a significant correlation to the ARV therapy non-compliance available in CST clinic. The low education level poses 5.7 times greater risk of not complying with antiretroviral therapy than those with high education [22]. In contrast, the study of Bam, K, et al. indicated that education level was not related to the minimum compliance to taking ARVs. In fact, lower education level suggested better compliance results [23].

The peer group in the CST Clinic of H. Abdul Manap Regional Public Hospital was very helpful for PLWHA, not only those who were infected with HIV but also prostitute workers, IDUs or MSM groups. In each of their activities, the term "WE" was always used, to make PLWHA feel that they were equal to others and to encourage PLWHA to open themselves [24], which was helpful for staffs in performing their duties.

There is still social stigma on PLHIV is the limitations of this study so that researchers do education first

CONCLUSION

A strong commitment from all stakeholders, especially the chairman of the hospital and the CST team, to improve the utilization of the clinic, is essential. The service SOP, the formation of a special team for scheduled and continuous monitoring and evaluation on SOP implementation and progress evaluation, periodic mentoring from the management and the Health Department, CST Clinic performance indicators, and last periodic evaluation on its progress are required. In addition, the coordination with the Department of Health and PKVHI (Association of Indonesian HIV Counselors) to conduct CST staff training, workload analysis of CST clinic workers, especially the nurses and the medical record keepers to reduce waiting time, follow up on the error of chairman's name in the Decree of CST organizational structure, the clarity of regional policies related to CST service, especially for the provision of CD4 reagents and tariffs, and last the hospital director's decree to instruct not to refuse treating PLWHA are necessary. The Advocacy of the Regional Government to increase the HIV service budget in the hospital and cooperation with *BPJS Kesehatan* (National Health Insurance Agency) to understand the procedure for claiming CST service for PLWHA with JKN are required. Last, the improvement in cooperating with work partners (peer counselors, Community Health Center, PLWHA groups, Social Department, and so on) is also required.

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