

## ANALYSIS OF HEALTH PROBLEMS OF THE HIV/AIDS PROGRAM IN THE MADIUN CITY POPULATION CONTROL AND FAMILY PLANNING HEALTH SERVICE

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### Abstract

**Background:** Based on UNAIDS data from 2019, Southeast Asia has 3.8 million of the world's HIV-positive people. In Asia, Indonesia has the fifth-highest risk of HIV/AIDS infection. According to the Madiun City Population Control and Family Planning Health Service, there will be 148 more HIV/AIDS cases in 2022, indicating a continued increase in cases. Analyzing the health issues with the HIV/AIDS Program at the Madiun City Population Control and Family Planning Health Service is the goal of this study. **Method:** This research is a descriptive study conducted during July–August 2023. Determining problem priorities using the Hanlon method and identifying the root causes of the problem. Primary data collection was carried out using the interview method, or in-depth interviews. **Results:** The results of determining problem priorities show that PLWHA who are new to ARV have not met the target of 95% and are based on the number of cases of PLWHA who are new to ARV from 2021, namely 29 cases and in 2022 there has been an increase of 43 cases. Identification of the root cause of the problem was carried out through interviews or in-depth interviews, that there were several factors that caused the occurrence of new PLWHA on ARVs, namely the low awareness of PLWHA to start treatment, the attitude of PLWHA who did not accept their HIV status so they did not want to start treatment and the lack of support from family/peer friends/ This is due to the lack of knowledge and information related to HIV/AIDS. **Conclusion:** This requires strengthening the mentoring program for PLWHA by providing assistance not only to PLWHA who have started treatment but all those who have been found to be immediately accompanied by NGOs, as well as involving local community leaders to promote anti-stigma.

**Keywords:** Causes of Problems, HIV/AIDS, Priority Problems.

### Introduction

Human Immunodeficiency Virus abbreviated as HIV is a virus that attacks the body's immune system and can cause Acquired Immuno-Deficiency Syndrome. Acquired Immuno-Deficiency Syndrome, hereinafter abbreviated as AIDS, is a collection of symptoms and signs of infection associated with a decrease in the body's immune system due to HIV infection. The HIV can be transmitted through unprotected sexual intercourse, blood transfusions and organ transplants from HIV-infected people, use of contaminated needles, and vertical transmission from HIV-infected mothers to their babies during pregnancy, childbirth, and breastfeeding. <sup>[1]</sup>

The largest HIV-infected populations in the world are in eastern and southern Africa (20.6 million cases), Asia and the Pacific (6 million), and Latin America (2.2 million) <sup>[2]</sup>. Indonesia is the 5th most at-risk country for HIV/AIDS in Asia. Reports of new HIV cases have increased every year since it was first reported in 1987. Based on Health Profile Data in 2019, it was reported that HIV cases in Indonesia

amounted to 50,282 cases and AIDS amounted to 7,036 <sup>[3]</sup>. In 2020, the number of HIV positive cases was reported at 41,987 cases, and the number of AIDS cases was reported at 8,639 cases <sup>[4]</sup>. In 2021, there will be a decrease in HIV cases, the lowest number of HIV-positive cases in the last 3 years, namely 36,902 cases reported, and the number of new AIDS cases tends to decrease in 2021, reported at 5,750 cases. The decline in HIV and AIDS cases in 2020 and 2021 was due to the COVID-19 pandemic. As of June 2022, the HIV figure was 22,331 people <sup>[1]</sup>

In the East Java Health Profile Data, the number of HIV cases as of December 2019 was 9,981 HIV cases and 1,254 AIDS cases were reported. <sup>[5]</sup> In January-December 2020 there were 7,395 and there were 467 AIDS cases. Of the number of AIDS cases, 36 of them died. This figure is much smaller than the actual figure because the estimation results until 2020 estimate that PLWHA in East Java will reach 59,317 people <sup>[6]</sup>. In 2021, the number of HIV cases reported was 5,538. There was a decrease in case detection compared to the previous year, with AIDS cases increasing by 544 cases, of which 102 cases died <sup>[7]</sup>. In 2022, the East Java Provincial Health Service revealed that there were more than 9,208 based on the HIV AIDS Information System report <sup>[8]</sup>.

The profile of the Madiun City PP & KB Health Service found 169 HIV/AIDS cases with details of 154 HIV positive and 15 AIDS cases. In 2020, the city of Madiun found 116 cases. Meanwhile, 42 new cases of AIDS were discovered. In 2021, HIV/AIDS cases in Madiun City will be 103 cases, with details of 87 HIV positive cases and 16 AIDS cases. Of these cases, 2 of them died. In 2022, the number of people who are HIV positive will be 148 people <sup>[9]</sup>

In line with the sustainable development goals (TPB) or SDG, the government is committed to ending AIDS by 2030 (Ending AIDS). As a form of this commitment, the Ministry of Health has developed a strategy for controlling HIV, AIDS and STIs which refers to the Global Strategy with a fast track and targets achieving 95-95-95 including: 95% of PLHIV know their HIV status, 95% of PLHIV infected with HIV still receive therapy ARVs, and 95% of PLHIV who receive ARV therapy experience viral suppression. Antiretroviral treatment (ARV) is one of the PDP programs with the aim of reducing morbidity due to HIV, AIDS-related deaths, and improving the quality of life of people infected with HIV <sup>[1]</sup>.

HIV sufferers need antiretroviral (ARV) treatment to reduce the amount of HIV in the body so that it does not enter the AIDS stage, while AIDS sufferers need ARV treatment to prevent opportunistic infections with various complications. The effort needed to suppress the virus's work properly is a very high level of adherence to ARV therapy, at least 95% of all doses must not be forgotten. The risk of therapy failure arises if the patient often forgets to take medication <sup>[1]</sup>.

Based on initial interviews with HIV program holders at the Madiun City PP & KB Health Service in 2023, the results showed that there were still several problems in the HIV program. One of them is NEW PLWHA ON ARVs which have not yet reached the 95% target. New PLWHA on ARVs in Madiun City from 2020 data were 31 people (74%), in 2021 there was a decrease of 29 people (67%) and in 2022 there were 25 people (83%) who had not started ARV treatment. Where the achievement of new PLWHA on ARV is still far from the target set, namely 95% <sup>[9]</sup>.

Based on the description above and considering that HIV among PLWHA Newly ON ARVs is still a problem at the Madiun City PP & KB Health Service, looking at the last three years, cases and achievements have not met targets, therefore it is necessary to carry out a more in-depth analysis of health problems at the PP Health Service & KB Madiun City.

## Method

This research is an observational descriptive study conducted at the Madiun City Population Control and Family Planning Health Service in July-August 2023. Secondary data was collected from the Madiun City PP & KB Health Service Profile and a database from the HIV/AIDS program manager at the health service. The dependent variable in this research is HIV/AIDS while the independent variables are priority health problems, root causes of problems, and alternative solutions to problems.

Determining problem priorities using the Hanlon method and determining the root cause of the problem was carried out using in-depth interviews with the person in charge of the program who was found through a fishbone diagram. Data collection in this research was carried out using in-depth interviews via questionnaires and data presentation in this research used tables and narrative text.

## Result

### 1. Identify the Problem

Identification of health problems is the main part of the problem-solving cycle, where the problem-solving cycle is a continuous process shown for the development of the health sector and the process of improving health services on an ongoing basis by involving all components of society [10]. Problem identification was carried out by interviews and document studies with section heads and staff in the infectious and non-communicable disease service sections. The list of health problems obtained is as follows:

**Table 1. List of problems in the HIV/AIDS program, Health Service, Population Control and Family Planning, Madiun City 2023**

No	Problem List
1	Low TPT Provision for PLHIV
2	New PLWHA on ARVs have not met the 95% target
3	Viral Load Check Achievements Still <95%

### 2. Problem Determination Analysis

Based on the results of problem identification, a list of problems was obtained for the HIV/AIDS program of the Health Service for Population Control and Family Planning in the city of Madiun. So, to determine problem priorities using the Hanlon Method. The Hanlon method is suitable for determining priorities, and is more effective for use for problems that are qualitative and/or the available data/information is qualitative. This condition is very suitable with the data collected from questionnaires and interviews [11]. Where the Hanlon criteria have meaning, namely:

- a. Factor A: The size of the problem (Magnitude)
  - a) The number or group of residents affected by the problem
  - b) Involvement of the community and related agencies.
  - c) Score 0-10 (small-big)
- b. Factor B: The level of seriousness of the problem (Emergency/Seriousness)
  - a) High morbidity and mortality rates
  - b) Trends over time.
  - c) Score 0-10 (not serious - very serious).
- c. Factor C: Ease of problem-solving (Causability)
  - a) The ease of problem-solving can be seen from the comparison between the estimated results or benefits of solving the problem that will be obtained
  - b) Score 0-10 (difficult – easy).

- d. Factor D: Factor that determines whether or not a program can be implemented (PEARL)
- a) P is appropriateness,
  - b) E is economically cheap (economic feasibility),
  - c) A is acceptable (acceptability),
  - d) R is the availability of resources (resources availability)
  - e) L is guaranteed legality.

Based on the results of the analysis of health problems, namely to find priority problems, analyze the causes of problems, and alternative solutions to problems, the following results were obtained:

No	Problem List	Criteria and Maximum Weights				PEARL	NPT	Problem Prioritization
		A (Large)	B (Emergency)	C (Easy)	NPD			
1	The provision of TPT is still low for PLHIV	7	6	5	65	11111	65	III
2	NEW PLWHA ON ARVs have not met the 95% target	9	10	5	95	11111	95	I
3	Viral Load Check Achievement which is still <95%	8	8	5	80	11111	80	II

#### Perhitungan Nilai Prioritas Dasar (NPD)

NPD	The provision of TPT is still low for PLHIV	$: (A + B) \times C$ $: (7 + 6) \times 5$ $: 13 \times 5$ $: 65$
NPD	NEW PLWHA ON ARVs have not met the 95% target	$: (A + B) \times C$ $: (9 + 10) \times 5$ $: 19 \times 5$ $: 95$
NPD	Viral Load Check Achievement which is still <95%	$: (A + B) \times C$ $: (8 + 8) \times 5$ $: 16 \times 5$ $: 80$

#### Perhitungan Nilai Prioritas Total (NPT)

NPT	The provision of TPT is still low for PLHIV	$: (A + B) \times C \times D$ $: (7 + 6) \times 5 \times 1$ $: 13 \times 5 \times 1$ $: 65$
NPT	NEW PLWHA ON ARVs have not met the 95% target	$: (A + B) \times C \times D$ $: (9 + 10) \times 5 \times 1$ $: 19 \times 5 \times 1$ $: 95$

NPT Viral Load Check Achievement which is still <95%

$$: (A + B) \times C \times D$$

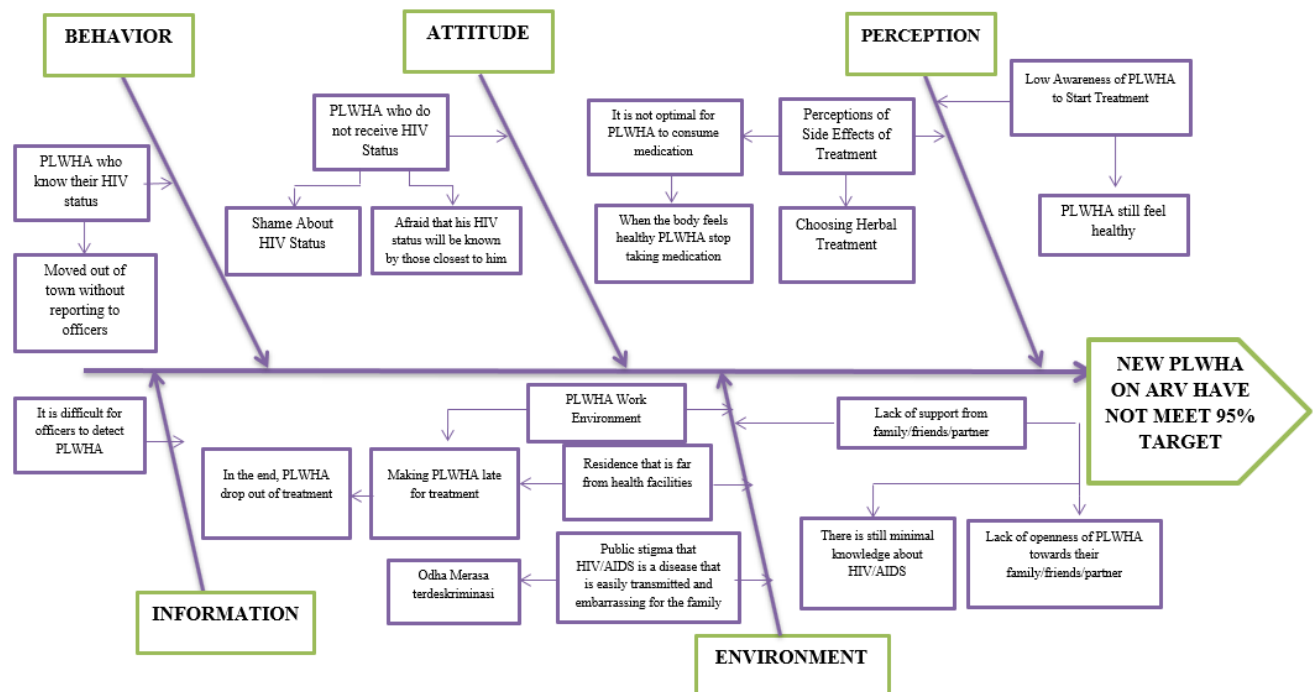
$$: (8 + 8) \times 5 \times 1$$

$$: 16 \times 5 \times 1$$

$$: 80$$

### 3. Problem Cause Analysis

Analysis of the causes of the problem is carried out on the problems selected as priority problems. Identify the causes of problems using a classification based on the factors that cause the problem including Perception, Attitude, Environment, and Information.



## Discussion

### 1. Determining Problem Priority

Problem Cause Analysis Analysis of the causes of the problem is carried out on the problems selected as priority problems. Identify the causes of problems using a classification based on the factors that cause the problem including Perception, Attitude, Environment, and Information.

### 2. Root Cause Analysis of Problems

Root cause analysis of the problem, several factors cause new PLWHA on ARVs to still be a problem, namely:

#### a. Perception

There is still low awareness among PLWHA to start treatment. Awareness is a perception and thought that is vaguely aware of by an individual until the final level of alertness focuses attention at a certain moment. This happens when PLWHA receives information regarding ARV treatment, but PLWHA feels that their health condition is good and does not need treatment so they ignore the ARV therapy that must be undertaken to maintain their health and PLWHA does not feel the severity of their health condition. Perceptions about the side effects of drugs influence PLWHA to start or stop treatment because of the information they get regarding the symptoms that arise when using antiretroviral drugs (ARV), namely dizziness, nausea, vomiting, skin rashes, itching, and even

hallucinations, this condition causes they are afraid to start treatment or decide on treatment because they are unable to withstand the side effects that appear. Side effects of ARV treatment are all symptoms that arise when using antiretroviral (ARV) drugs, ranging from symptomatic symptoms that can be eliminated by administering drugs to symptoms of toxicity that cause drug use to be stopped. The side effects that arise can reduce compliance with drug use <sup>[12]</sup>. ARV doses contain a combined number of pills which causes side effects in some patients such as nausea, stomach discomfort, vomiting, diarrhea, and skin rashes as a result the majority of patients abandon their doses and stop attending the clinic as scheduled <sup>[13]</sup>. This perception makes PLWHA choose to take herbal treatment rather than taking ARVs and makes PLWHA less likely to consume medication. This is also caused when PLWHA feels that their body is healthy again and stops taking treatment.

**b. Attitude**

Attitude is a person's response to a particular object which involves several factors such as opinions and emotions in question such as happy or unhappy, agree or disagree, good or bad, and so on. <sup>[14]</sup>. A positive attitude should be able to make and help respondents to be more regular and come to take medicine, according to schedule or carry out ARV therapy better <sup>[15]</sup>. The attitude of PLWHA who do not accept their HIV status so they do not want to start treatment is because PLWHA feel embarrassed and afraid of having their HIV status known and ultimately choose to move out of town. To do the test again in a different place makes it difficult to start treatment. This attitude also causes PLWHA who have not started treatment to die because they do not believe in their HIV status.

**c. Behavior**

Behavior is a manifestation as a statement of a person's response or reaction to stimuli in a certain social environment <sup>[16]</sup>. The behavior of PLWHA when they know their HIV status but still do not want to take ARV treatment and decide to move without a report from the Community Health Center Officer at the place where the PLWHA carries out an examination which results are positive. This behavior can increase the risk of death and make it difficult to evaluate ARV therapy services. Apart from that, it will result in a higher risk of transmission. PLWHA who are not on ARV therapy will be at risk of transmitting the virus to other people. <sup>[17]</sup>

**d. Environment**

The environment is a very important factor in starting treatment for PLWHA. Humans need an environment that can support their lives, including a healthy environment, meaning that it is not only free from pollution or pollution but is also sufficient for life's needs, a productive environment, namely an environment that can produce optimal needs in terms of location and biology. Diverse environments, namely environments that have variations in physical and socio-economic potential. A beautiful environment, namely an environment that can provide calm, inspiration, and freshness <sup>[18]</sup>. This lack of support from family/peers/partners is due to the lack of knowledge of family/friends/partners regarding HIV/AIDS and makes people living with HIV afraid to open up about their status. The work environment is also an indicator of why PLWHA do not start treatment or drop out of treatment. This is because PLWHA is busy with their work, which makes PLWHA start treatment late, or in the end, PLWHA choose to drop out of treatment. Living far from health facilities also influences PLWHA to start treatment because there are some PLWHA who choose access far from where they live to hide from the local community or neighbors about their HIV status. The stigma of the local community regarding HIV/AIDS, an easily contagious and embarrassing disease, makes PLWHA feel isolated or discriminated against. This act of discrimination makes the psychological condition of PLWHA worsen, such as feeling frustrated with their HIV status and deciding not to start treatment or stop ARV therapy. This also affects prevention and care efforts for PLWHA, causing PLWHA to linger in silence and denial and strengthening the marginalization of PLWHA. This is the same as research conducted by Rosiana (2017), who said that the high rate of loss to follow-up is one of the contributing factors is social support, especially from the family.

PLWHA clients tend to experience negative stigma and discrimination from society. Efforts need to be made to slow down <sup>[19]</sup>

#### **e. Information**

Information is information, statements, ideas, and signs that contain values or facts that are presented in various format packages by technological developments. Access to information about HIV/AIDS is one of the important things to increase knowledge for the community, especially students, thus students have an important role to contribute to society in efforts to overcome HIV/AIDS <sup>[20]</sup>. In the results of the root cause analysis, the information problem is one of the causes of PLWHA ON ARV, where officers find it difficult to detect PLWHA because they cannot directly go to the PLWHA's residence and there is a lack of information regarding PLWHA who have been declared Positive.

### **Conclusion**

The conclusions from the analysis of health problems at the Madiun City Population Control & Family Planning Health Service in 2023 include:

1. Based on the identification of health problems in the Madiun City Population Control & Family Planning Health Service, it is HIV/AIDS with a list of problems, namely Providing low levels of Tuberculosis Prevention Therapy to PLHIV, New PLWHA on ARVs have not met the 95% target and Achievement of Viral Load Check which is still low at 95%
2. Determining problem priorities using the Hanlon method and the results obtained are that the problem priority is 95%. New PLWHA on ARVs have not met the 95% target. This is also supported by data from 2023 to June with an achievement of 28%.
3. Based on the analysis of the causes of the problem with the help of the Fishbone diagram at the Population Control & Family Planning Health Service, several causes of the problem were found, namely Perception: Low awareness of PLWHA to start treatment and perception about the side effects of treatment, Attitude: PLWHA who do not accept HIV Status, Behavior: PLWHA who know their HIV status and immediately move out of town without reporting to health workers, Environment: Work environment for PLWHA, residence far from health facilities, community stigma that HIV/AIDS is a disease that is easily transmitted and embarrassing for the family, and lack of support from family/friends/partner, and Information: It is difficult for officers to detect PLWHA

To increase the achievement of the Target for New PLWHA on ARVs in the Madiun City Population Control & Family Planning Health Service Work Area, this can be done by increasing public understanding regarding HIV/AIDS to reduce the negative stigma that occurs in society.

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