



# Antenatal Care for Pregnant Women Infected with HIV/AIDS in Bonto Bahari District, Bulukumba Regency, Indonesia

Sitti Raodhah\*<sup>1</sup>, Sukfitrianty Syahrir<sup>1</sup>, Nildawati Nildawati, Andi Nuryana, Abd. Majid H. R. Lagu

Department of Public Health, Faculty of Medicine and Health Science, Alauddin State Islamic University, Makassar, Indonesia

## Abstract

**BACKGROUND:** Cases of HIV transmission continue to increase in Bulukumba District. Of these cases, the most transmission is through sexual contact, which results from one person being transmitted to his family. Then integrated Antenatal Care (ANC) cannot be implemented in all Puskesmas, especially services for patients with HIV positive pregnant women.

**AIM:** The purpose of this study was to determine the description of ANC in pregnant women infected with HIV/AIDS in Bonto Bahari District, Bulukumba Regency.

**METHODS:** This study used a qualitative method with a phenomenological approach. Data were collected through in-depth interviews with snowballing sampling techniques. The number of informants was six people consisting of one key informant and five primary informants. Qualitative data analysis was carried out interactively through data reduction, display data, and verification processes.

**RESULTS:** The knowledge of pregnant women about HIV was low. In areas where HIV-infected pregnant women live, the health service center is available such as a Public Health Centre (*Puskesmas*) that can be accessible. Pregnant women were looking for treatment at the *Puskesmas* around their area. Unfortunately, some pregnant women did not search for any treatment since they were afraid of their HIV status revealed by health workers and people in *Puskesmas*. At *Puskesmas*, they only obtained poor service and discriminated from other non-HIV pregnant women. Those pregnant women acquired support from the family emotionally, financially, and information support. However, some of them also had no support from their families after knowing their illness.

**CONCLUSION:** Knowledge of HIV/AIDS by pregnant women with HIV positive was low. After realizing that their husbands were infected, they were furious and disappointed with their husbands. Besides, the health workers were not good at serving those pregnant women positively with HIV/AIDS. They tended to discriminate from other patients without HIV/AIDS. Family support for pregnant women was including emotional, financial, and information supports. The implication of this research is to increase health promotion in the form of counseling to increase public understanding of the importance of HIV/AIDS prevention education.

**Edited by:** Sasho Stoleski  
**Citation:** Raodhah S, Syahrir S, Nildawati N, Nuryana A, Lagu AMHR. Antenatal Care for Pregnant Women Infected with HIV/AIDS in Bonto Bahari District, Bulukumba Regency, Indonesia. Open Access Maced J Med Sci. 2021 Aug 20; 9(E):681-689. <https://doi.org/10.3889/oamjms.2021.6211>  
**Keywords:** HIV/AIDS; Knowledge; Attitudes; Accessibility of Antenatal Care Services; Family; Workers  
**\*Correspondence:** Sitti Raodhah, Department of Public Health, Faculty of Medicine and Health Science, Alauddin State Islamic University, Makassar, Indonesia. E-mail: [sitti.raodhah@uin-alauddin.ac.id](mailto:sitti.raodhah@uin-alauddin.ac.id)  
**Received:** 16-Apr-2021  
**Revised:** 14-Jun-2021  
**Accepted:** 10-Aug-2021  
**Copyright:** © 2021 Sitti Raodhah, Sukfitrianty Syahrir, Nildawati Nildawati, Andi Nuryana, Abd. Majid H. R. Lagu  
**Funding:** This research did not receive any financial support  
**Competing Interests:** The authors have declared that no competing interests exist  
**Open Access:** This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0)

## Introduction

HIV/AIDS is a disease that continues to develop and has become a global problem that is sweeping the world. The problem of HIV/AIDS is believed to be like an iceberg phenomenon because the number of reported cases does not reflect the real problem [1]. At the end of 2016, it was estimated that 36.7 million people in the world live with HIV, as many as 1.8 million people were newly infected with HIV, and caused 1 million deaths in 2016 [2]. There are 34.5 million people infected with HIV globally, with 17.8 million female sufferers, while 2.1 million sufferers of children aged <15 years [3]. Southeast Asia ranks second as the most considerable HIV sufferer after Africa, which is 3.5 million people, with 39% of people with HIV being women and girls [2], [4].

Cases of HIV transmission continue to increase in Bulukumba District. The Bulukumba HIV/AIDS Commission (*Komisi Pemberantasan HIV/AIDS*) recorded 231 cases of people with HIV/AIDS in

Bulukumba from 2016 to 2018. The spread of HIV/AIDS is divided into ten sub-districts in Bulukumba. The highest number of HIV/AIDS sufferers was in Ujung Bulu District, with 94 cases from the data obtained, followed by Bonto Bahari District with a total of 86 cases. Of these cases, the most transmission is through sexual contact, which results from one person being transmitted to his family.

Integrated Antenatal Care (ANC) cannot be implemented in all Public Health center (*Puskesmas*). Integrated ANC services that have not been carried out in all Puskesmas are due to several things related to the facilities and capabilities of the officers. It is following research by Mikrajab and Rachmawati (2016) which shows that the role of policyholders is still not maximal in bridging integrated ANC services. Other research shows that cross-sectorial cooperation between policy actors in the regions in implementing the integrated ANC at Puskesmas is still low and running partially. This has resulted in inadequate availability of laboratory and ultrasound facilities for examination of pregnant women in several areas so that the integrated ANC service has

not been maximized. Regional regulations related to routine laboratory examinations and medical indications have not been in favor of poor/poor pregnant women [6].

This study aims to determine ANC descriptions in pregnant women infected with HIV/AIDS in Bonto Bahari District, Bulukumba Regency.

## Methods

It was qualitative research. Located in Bonto Bahari District, Bulukumba Regency in 2019, the research approach was phenomenology. This qualitative approach focuses on individual subjective understanding. The informants were pregnant women infected with HIV/AIDS. The key informants were health workers regarding ANC services for pregnant women infected with HIV/AIDS.

The instruments used in this study were interview guidelines, observation guidelines, documentation study guidelines, notebooks, cameras, voice recorders, and other supporting tools. Data analysis techniques were carried out after the data collection process to obtain good information, including (1) data reduction, (2) display data, and (3) verification.

The data reduction stage in this research is to summarize, select the main things, classify the data on important things, look for themes, and patterns. Data reduction simplifies data resulting from interviews to obtain more focused data. The presentation of data in qualitative research is in the form of narrative text in the form of descriptions, charts, and relationships between variables and others. In this study will present a description of the description of ANC for pregnant women infected with HIV and AIDS in Bonto Bahari District, Bulukumba Regency. Conclusion and data verification are the third stage in the data analysis process in this research. Data verification is carried out in this study on an ongoing basis to obtain conclusions with strong and credible evidence.

## Results

### **Characteristics of informants**

Research informants consisted of pregnant women infected with HIV/AIDS. Meanwhile, the key informant (interview informant) as the cross-checker was the health worker at the Bonto Bahari Community Health Center. The following are the characteristics of the primary and critical informants (Table 1).

### **Occupation**

Based on in-depth interviews with the five informants, some informants stated that their husbands initially worked as sailors. However, after their husbands were infected with HIV, they now stay at home to gain treatment. It was stated as below:

*“In the past, my husband was a sailor who went overseas anyway, but when he got the disease, he stayed at home for treatment”* (Ji, 35 years, pregnant woman, September 2019)

*“My husband’s sailor, but for now rest at home for treatment”* (Nh, 36 years, pregnant woman, September 2019)

Meanwhile, some informants stated that their husbands had died from HIV disease which infected the informants. Those informants stated that now she was not working and preferred to rest at home and look for treatment.

### **Knowledge**

The knowledge in this study was including all the matters related to HIV/AIDS that the pregnant women know. It was starting with the abbreviation of HIV/AIDS, the modes of its transmission, and the prevention. Based on interviews with five informants, three informants did not know the abbreviation of HIV. The following are some of their statements:

*“I do not know what that stands for, and I never did to find out”* (Nh, 36 years, Pregnant woman, September 2019)

*“I do not know”* (Ji, 35 years, Pregnant woman, September 2019)

In the knowledge of the abbreviation of HIV/AIDS, two informants answered correctly. However, there were still hesitant answers, and other information still did not know the abbreviation of HIV.

Other informants already understood the transmission of HIV. Following are the answers from the four informants who already knew about HIV transmission. The modes of transmission of HIV that were known to the informants, such as through drugs, use of unsterile needles, blood transfusions, unsafe sex, multiple partners, the transmission of HIV from

**Table 1: Characteristics of informants**

Characteristics	Category	Informants	
		Pregnant	Health workers
Sex	Female	5	1
Age (year)	25	0	1
	29	1	0
	31	1	0
	33	1	0
	35	1	0
	36	1	0
Education	SD	3	0
	SMP	2	0
	SMA	0	0
	D3	0	1

mother to children through pregnancy, childbirth, and breast milk. The following are some in-depth interviews:

*"It is normal to get infected through drugs, needles, contact with people who have HIV, and also breast milk"* (Mi, 33 years, Pregnant woman, September 2019)

*"Do not use drugs and do not mutually partner"* (Aw, 31 years, Pregnant woman, September 2019)

Based on in-depth interviews with the five informants, it can be concluded that the informants' knowledge of HIV transmission was reasonably good.

The research related to informants' knowledge about how to prevent HIV was illustrated from interviews with informants, as followed:

*"Use condoms when you have sex and do not use drugs. Also check with the doctor so that we know if we have HIV or not"* (Dp, 29 years, Pregnant woman, September 2019)

From the informant's quote, it can be seen that other people should not infect the informant's knowledge of HIV prevention. They said it could be conducted by using condoms during sexual intercourse and not using drugs. The informant also conveyed that self-examination to find a positive HIV status is also needed in HIV prevention. Its function is to be able to carry out HIV prevention as early as possible.

Other informants also explained that to prevent HIV was by being loyal to a partner and use a condom during sexual intercourse. Besides, not using drugs. It was stated in the in-depth interviews below:

*"You have to be loyal to your partner. If you like to change partners, then you have to have a healthy behavior, so you do not get HIV"* (Ji, 35 years, pregnant woman, September 2019)

Some explain how to prevent HIV to the prevention of mother-to-child transmission (PMTCT) program. This program is a governmental program to reduce the incidence of HIV in children, often transmitted from mother to child. The following are excerpts from some of the in-depth interviews:

*"Prevention is not to use unsterile syringes, continue to avoid blood donations, avoid free sex without a condom, continue from mother to child, well prevention is named PMTCT"* (Nh, 36 years, pregnant woman, September 2019)

Meanwhile, some informants explained prevention using the ABCDE method, Abstinence, Be faithful, Condom, Drugs, and Education. This program is an invitation from the government, so people been infected with HIV do not transmit HIV to other people. Also those who have not been infected with HIV to avoid HIV transmission. The following are their statement:

*"Well, you have to be loyal to your partner, unsafe sex without a condom. The prevention*

*is the government's program, called ABCDE. A is abstinent, that means do not just have sex, B is to be loyal to a partner, C is using a condom for safety, D is far from using it, then E is about HIV. That is what I heard about government prevention programs"* (Mi, 33 years, pregnant woman, September 2019)

The five informants already knew how to prevent HIV through sexual prevention, such as not having free sex, being loyal to a partner, and using condoms if there a bad behavior between partners. In non-sexual HIV prevention, the informants also knew to not using injecting drug users and avoiding blood transfusions. Hence, they would not be the cause of HIV transmission to others. Some informants alluded to the ABCDE program to prevent HIV. Other informants also added prevention through mother-to-child transmission in HIV prevention, better known as the PMTCT program.

### Attitude

In this study, the attitude was including when the mother was infected with HIV/AIDS, when she found out that she was infected from her husband and the attitude of health workers in serving pregnant women who were infected with HIV/AIDS. The informants stated that initially, they infected with HIV/AIDS because they infected by their husbands. The informant's husband's job was a sailor. The informant's husband left his family and then having sex with other women. Her husband infected HIV from outside and then brought it into the household. When he returned to having sex with his legal wife, she soon became infected with HIV. Their statements are below:

*"Initially from my husband. My husband is a sailor, mongering. At his place of work, if the ship is on land again, they would having sex, he has to do with other women"* (Ji, 35 years, pregnant woman, September 2019)

*"My husband works as a sailor, so sometimes when he reaches the land, he has sex with other women. Returns to the village, he has contact with me, then infected."* (Mi, 33 years, pregnant woman, September 2019)

It can be concluded from the results of the interview that their husbands infected the five informants. There was an informant whose husband works as a sailor, the informant's husband having sex outside. It means that the informant's husband had sexual relations with other women. The husband did not know whether the woman had a history of HIV disease. An informant's husband was infected through sexual contact with other women. However, the informant's husband was not infected but was infected by a female sex worker in the Bira Beach area. From there, the informant infected HIV.

The informant expressed anger when it was discovered that she had infected it from her husband.

The following were excerpts from some of the in-depth interviews:

*"My husband had infected the disease. At first, I wanted to be angry, but well, what did I want to do? My husband was sorry and apologized to me too. Immediately my husband said to continue to seek treatment so that the body become strong"* (Dp, 29 years, pregnant woman, September 2019)

*"Initially, I caught it from my husband. I was furious because my husband lived in the village, not like other people whose husband was sailing. Also, I thought he could not possibly cheat on me behind. My husband was furious. He regretted his actions because this is the result"* (Aw, 31 years, pregnant woman, September 2019)

The informants stated that they were furious and disappointed since they had infected with HIV from their husbands. Some informants stated that initially, her husband did not want to admit it and even hesitated to answer that he was HIV positive. The following are some of their statements:

*"Initially, my husband did not want to admit it since he felt guilty for being dishonest with me because of his HIV disease. I do not think I am infected with a disease like this for which there is no cure. I am just waiting for a long time to return to Allah, our Lord. Now continue to seek treatment at the public health center"* (Mi, 33 years, pregnant woman, September 2019)

An informant also stated that she had infected with HIV from her husband when it was found out. They said that they were resigned to their current situation, and this was the fate they had to live with their family. The following are excerpts from some of the in-depth interviews:

*"Yeah, maybe it is God's destiny for my husband and me. Now my husband has regular medical treatment at the public health center"* (Nh, 36 years, pregnant woman, September 2019)

*"Surrender, what do you want to do. For now, we routinely go to the public health center for treatment"* (Ji, 35 years, pregnant woman, September 2019)

The two informants stated that the informant was very angry and disappointed when they discovered that the informant had infected with HIV from their husband. Another informant stated that initially, her husband did not want to admit it and was hesitant to answer that he was HIV first. Meanwhile, two other informants stated that she was resigned to his current situation. That was the fate she had to live with his family.

Pregnant women who seek treatment at the public health center in the area where they live stated that the attitude of the health workers is not good. There

was a difference between pregnant women who are infected with HIV and those not infected with HIV. It can find out in the following statements:

*"The health workers seemed angry when I checked again. However, the other patient, they do not get angry. I did not know why the service was different from mine. Maybe I feel uncomfortable because of my illness"* (Jl, 36 years, pregnant woman, September 2019)

*"How they are serving is different, to other non-HIV patients are good serving. However, it seemed they do not want serv me for a long time. I do not know why"* (MI, 29 years, pregnant woman, September 2019)

Some informants did not seek treatment at the Public Health Centre in the area where they lived. The informant stated that the staff served as usual and was not differentiated from other patients who did not have a history of HIV. They stated as follows:

*"Good service as usual if you check. even though they know my disease, it is also good how to check me"* (DP, 29 years, pregnant woman, September 2019)

Meanwhile, health workers stated that in serving pregnant women who were infected with HIV/AIDS. The officers served as usual, but some ordinary officers treated them differently when they found out that the pregnant woman was infected with HIV. The following are excerpts from some of the in-depth interviews:

*"Initially, the officers here served patients as usual. Nevertheless, I do not know why people who have HIV disease are immediately changed and different from other patients who do not have a history of HIV. If pregnant women are examined, and officers know that infected HIV disease, they immediately silent. Then, they continue to take a handsocon, and the examination is fast and does not take long. I contrast, other patients who do not have a history of HIV usually do not use a handsocon when checking"* (Ls, 25 Health Workers, September 2019)

### **Accessibility of the ANC services**

Accessibility here is the availability of ANC services received by pregnant women infected with HIV/AIDS. The health service center around them may respond and service HIV-infected pregnant women and HIV-uninfected pregnant women. It also including case management for pregnant women infected with HIV/AIDS. Furthermore, it was known that all informants stated that in the area where they live, there is a health service center that is easily accessible. The following are excerpts of some in-depth interviews:

*"Yes, about 15 km from the house, not too far"* (Mi, 33 years, pregnant woman, September 2019)

*"Yes, it is close, thank God"* (Ji, 35 years, pregnant woman, September 2019)

However, several informants did not seek treatment at the local *Puskesmas* where they lived. The informants are afraid that the community around their place will reveal their HIV status. Here is their statement:

*"I do not want to go to my house for treatment, the people from the Puskesmas are my neighbors; they are afraid they will know that they have HIV. Not ready yet"* (Nh, 36 years, pregnant woman, September 2019)

*"Shame on meeting my neighbors or people who know when they are at the Puskesmas"* (Dp, 29 years, pregnant woman, September 2019)

Based on the information obtained from the five informants regarding the existence of a health service center, all informants stated that health service center, namely, the *Puskesmas*. At a health service center in the area where she lives, the informant was afraid that their illness would be discovered by neighbors or known people treated at the *Puskesmas*.

Three informants who sought treatment in their area of residence stated that they received changes in treatment and services from health workers after knowing their status as HIV sufferers. Meanwhile, pregnant women infected with HIV get an excellent response and service treatment from their health workers. The following are the results of the interview:

*"Initially, before the health workers knew my disease, there were good, the service was good too. When they knew, the officers seemed angry, and the service was very different from pregnant women who did not have HIV"* (Mi, 33 years, pregnant woman, September 2019)

*"The health workers seemed unwilling to check on me. It was like hesitating when touching me, not like yesterday before knowing my illness"* (Aw, 31 years, pregnant woman, September 2019)

*"The point is that the attitude of the officers is very different when it comes to me when they are examined, not the same with pregnant women who do not have HIV. Their response better to the not-HIV pregnant woman"* (Ji, 35 years, pregnant woman, September 2019)

Based on in-depth interviews with health officers, it was stated that the program of the *Puskesmas* was counseling by visiting houses and Kape in Bira. The following are their statement of the in-depth interviews:

*"The program from the Puskesmas is for HIV cases, namely counseling. Come to the residents' houses of HIV. However, this is the government's program which is not very active, sometimes. It is also normal to suddenly go to counseling when there are more new cases of*

*HIV infection. They also came to Kape, which was in Bira and wanted to be examined by the people there. They are checked for free"* (Ls, 25 years, Health workers, September 2019)

It can be concluded from in-depth interviews with health workers that the Bonto Bahari Community Health Center's program in counseling. This counseling was carried out by visiting residents' homes. This extension program is not running as well as it should be. This program will run again if there are new HIV cases and a visit to Kape in Bira to conduct a free examination.

### **Families**

The family in this study is how the family of pregnant women reacts to their current situation, and how is the form of family support for pregnant women to HIV disease they suffer. When they revealed that they were HIV positive, the informant's family was shocked and did not expect the informant to have such a severe disease. The following are the results of the in-depth interview:

*"Yes, I must be shocked because of this serious disease. So sad when they found out"* (Ji, 35 years, pregnant woman, September 2019)

*"I was shocked by my family and did not expect to have such a disease"* (Nh, 36 years, pregnant woman, September 2019)

*"Yes, my family was surprised. They immediately saw gloomy"* (Dp, 29 years, pregnant woman, September 2019)

It can be concluded that, in general, the family's reaction was shocked when the informant told them that the informant had HIV.

Based on the in-depth interviews with these informants, three informants stated that the informants received support from their husbands, fathers, mothers, and younger siblings who were HIV positive informants. The following are the statements:

*"Yes, thank God, the family provides support because they are always accompanied when they go for treatment"* (Aw, 31 years, pregnant woman, September 2019)

*"My family always helps. My mother helps money if needed for treatment"* (Mi, 33 years, pregnant woman, September 2019)

Meanwhile, others stated that after discovered their illness, the family seemed to stay away from the informant because the informant's family was afraid of contracting the informant's illness. Their statement is as follows:

*"My husband gave me enthusiasm when he came to HIV disease, but my mother, father, sister seemed to stay away and never even came to my house again"* (Nh, 36 years, Pregnant mother, September 2019)

AIDS (PLWHA) who not accept their status do not want to come to Voluntary Counseling and Testing (VCT) service centers. Other research shows that almost all mothers with higher education work outside the home, so that it will support their time to take advantage of VCT services. In addition, highly educated people will be more aware of seeking health information independently which is important for themselves when facing pregnancy and will tend to prefer higher health services than Puskesmas [16]. It because PLWHA experience fear and despair when they find out that they are infected with HIV [17], [8].

## Discussion

### Knowledge

Knowledge is the most crucial part of behavior. Behavior that is based on knowledge will last more than behavior that is not based on knowledge [7]. The HIV positive women may know about HIV, including its transmission and prevention. It will prevent them from taking risks. It is due to their motivation to keep safe and avoid the possibility of HIV transmission [8], [9], [10].

Based on our interviews regarding the abbreviation of HIV, some informants answered doubtfully, and some informants did not know the abbreviation HIV stands. However, knowledge of the modes of HIV transmission appears to be good. The ways of HIV transmission were known by the informants, such as through drugs, use of unsterilized needles, blood transfusions, unsafe sex, and mother-to-child transmission of HIV through pregnancy, childbirth, and breast milk [11], [12].

Knowing the HIV transmission will be easier for informants to protect HIV in their bodies from being transmitted to other people [13]. It reveals that the informants already understood how HIV is transmitted, both by sexual transmission and non-sexual transmission by contact with blood through transfusions or unsterile needles. Informants also knew that breast milk could also affect HIV transmission from mothers who provide breast milk to their children. Some informants explained that transmission from mother to child could also be transmitted during childbirth.

The knowledge of HIV prevention was proven by knowing how to prevent HIV both through sexual prevention. It is including not having free sex, being loyal to a partner, and using condoms if they have multiple partners. It was also valid for non-sexual-HIV prevention, such as not using injecting drugs and avoiding blood transfusions. They do not become the cause of transmitting HIV to others. Some informants alluded to education and prevention through mother-to-child transmission in a way to prevent HIV. Knowledge of HIV/AIDS is an essential factor that can influence a person's attitude [10], [14], [15].

Understanding HIV/AIDS illustrate that they did not only know information about it but also explained and interpreted its aspects, such as the transmission and prevention. This condition will be inversely proportional to other studies. People living with HIV/

A high level of knowledge about HIV and AIDS is fundamental for informants to prevent transmission positively. The results were in line with Husnul Umam; people at high risk of being infected with HIV commonly get information about HIV and AIDS from the mass media and health workers. The environment also has a vital role in influencing the amount of information obtained. It happens because of reciprocal interactions that will be responded to as knowledge by individuals [18].

### Attitude

The attitudes in this study were the attitudes of mothers in dealing with HIV/AIDS. The mother suffered from, including when the mother was infected with HIV/AIDS. The mother's attitude when she found out that her husband infected her. The results of this study indicate that their husbands infected the five informants. An informant whose husband works as a sailor, the informant's husband has sex illegally outside. It means that the informant's husband had sexual relations with other women. The spread of HIV can occur if a husband has sexual relations with a woman who has a history of HIV and the husband does not know this [19].

Meanwhile, two informants stated that the informant was very angry and disappointed when they discovered that they had HIV from their husbands. One informant stated that the husband felt hesitant to tell the informant honestly that he was infected with HIV. The husband of this informant felt guilty toward his wife because the informant's husband had sex with an HIV-infected woman. Meanwhile, two other informants stated that they were accepting their current situation, which was their destiny to live. Attitudes have an important influence on services, especially for pregnant women who are HIV positive [20], [21].

Meanwhile, the attitude of health workers in providing services for HIV positive pregnant women was very different from other patients without a history of HIV. Other studies have shown that there is a stigma from private practice midwives who consider HIV and AIDS pregnant women to be female sex workers and someone who has deviant behavior, assuming HIV and AIDS pregnant women have a deadly and dangerous virus so that midwives will differentiate between

services for HIV and AIDS pregnant women with other patients [22]. The difference was evident after health workers know HIV disease in pregnant women. Some health workers still assumed that all babies born to HIV positive mothers would also be infected with HIV. It is due to the baby's blood combines with the mother's blood in the womb. The fetal and maternal blood circulation is separated in the placenta by several layers of cells. Oxygen, food, antibodies, and drugs can penetrate the placenta, but HIV usually cannot. The placenta protects the fetus from HIV infection. Unless the placenta is inflamed, infected, or damaged, the virus may more easily penetrate the placenta, so there is a risk of HIV transmission to the baby. HIV transmission generally occurs during childbirth when the possibility of mixing the mother's blood and the mother's mucus with the baby [11], [23].

### **Accessibility of ANC service availability**

In getting health services, the distance between the living area and the health service place affects it. The closer the distance, the easier it is for someone to get health services (Katiandagho, 2015). However, this theory does not apply to people living with HIV, who were informants in this study.

The results showed the five informants regarding the existence of a health service center. All informants stated a public health center in the area where they live, namely, the *Puskesmas*. Three informants stated that they were looking for treatment in their area with a health service center. However, two other informants stated that they were ashamed to find out treatment at a public health center in the area where they lived. It was due to the informant was afraid that their HIV case would be discovered by neighbors or known people at the *Puskesmas*. Access to the affordability of medical costs and access to health facilities is essential for the community [24].

Meanwhile, the response and ANC services, three informants stated that they received differently in treatment and services from health workers after knowing their status as HIV sufferers. Meanwhile, pregnant women non-HIV obtained a very good response and service treatment from their health workers. Meanwhile, two other informants who sought treatment, not in their area of residence, stated that the response and service of health workers were outstanding. Even the health worker knew that the informant was HIV positive. The informant stated that the officer did not differentiate between pregnant women infected with HIV and pregnant women who were not infected with HIV. According to Fitriani *et al.* (2013), the stigmatization of HIV and AIDS pregnant women is mainly because health workers consider they were female sex workers and deviant behavior. They consider HIV and AIDS pregnant women to have deadly and dangerous viruses, thus differentiating services for HIV and AIDS pregnant women.

Meanwhile, in the HIV case prevention program for pregnant women, health workers provide ARV drugs. This ARV is a government program that must be consumed immediately after diagnosed with HIV so that the development of HIV can be controlled [26]. Meanwhile, the program from *Puskesmas* Bontobahari regarding HIV cases was counseling. This counseling was carried out by visiting residents' homes. However, this extension program was not running as it should be. This program would run again if new HIV cases found. Besides counseling, health workers visit commercial sex workers in the Bira area to carry out free HIV checks.

The quality of health services is generally defined as the degree of perfection of health services following professional standards and service standards using the potential resources available at the hospital or *Puskesmas* in a reasonable, efficient, and effective manner and provided safely and satisfactorily according to norms, ethics, law, and socio-culture by taking into account the limitations and capabilities of the government, as well as the consumer society [27]. It means that quality health service is a health service that is needed. In this case, it will be determined by the health service professionals. At the same time, it is desired by both the patient and the community and is affordable [28].

Good communication in someone's health service will help a good reception from patients. Health-care providers are in a key position to create an atmosphere of acceptance and family understanding of people with HIV/AIDS [29].

### **Families**

The results showed that the five informants stated that their family's reaction was shocked when the informant told them that they had HIV [29], [30]. Meanwhile, the form of family support in this study impacted the recovery of pregnant women infected with HIV. This study indicates that three informants stated that the family was very supportive, such as emotional support, financial support, and information support. Meanwhile, two other informants stated that their family turned ignorant when they learned of their HIV positive status [29], [31], [32]. Family decisions have an effect on the choice of health services to place in the prevention of HIV-AIDS [33].

The impact of family support felt by mothers with HIV detection was happiness, awakening enthusiasm for life, and calming. Family support has a significant effect on health status, self-confidence in decision-making and social isolation [34], [35]. Family support can bring joy, security, satisfaction, comfort, and make the person concerned feel emotional support that will affect the human soul's well-being. Support also inspires enthusiasm for life, and this is an optimistic attitude to find something better. People who have an automatic attitude can always find the positive aspects of various situations [36].

Family support is objections, sorrow, caring from people who can be counted on, value and love us. Family support is a means of comfort, attention, appreciation or helping people with an attitude of accepting their condition. Family support is obtained from individuals or groups [37].

## Conclusion

Knowledge of HIV/AIDS by pregnant women with HIV positive was low. Commonly they did not know the abbreviation of HIV/AIDS. However, they had good knowledge of HIV/AIDS transmission and prevention. After discovering that their husbands were infected, they were furious and disappointed in their husbands. Furthermore, some of them gave up and surrendered to God. When serving pregnant women infected with HIV/AIDS, the attitude of health workers was not good. It discriminated from other non-HIV/AIDS patients.

Access to ANC services related to HIV/AIDS by pregnant women with HIV positive that health service center was available and accessible. Family support for pregnant women was obtained from partners, parents, and siblings emotionally, financially, and information support. There were also family members who did not provide any supports to the pregnant woman with HIV.

## References

- Hardisman H. HIV/AIDS di Indonesia: fenomena gunung es dan peranan pelayanan Kesehatan Primer. *Kesmas*. 2009;3(5):236. <https://doi.org/10.21109/kesmas.v3i5.216>
- World Health Organization. *Global Epidemic HIV 2017*. Department of HIV/AIDS, Geneva: World Health Organization; 2017.
- UNAIDS. *UNAIDS DATA 2017*. Joint United Nations Programme on HIV/AIDS UNAIDS; 2017. [https://doi.org/10.1007/978-3-319-46013-0\\_3](https://doi.org/10.1007/978-3-319-46013-0_3)
- Kemendes RI. *Info HIV 2020*. Indonesia: Infodatin Kemendes RI; 2020. <https://doi.org/10.32922/jkp.v8i2>
- Mikrajab MA, Rachmawati T. Policy analysis of integrated antenatal care implementation at public health centers in Blitar city. *Bul Penelitian Sistem Kesehatan*. 2016;19(1):41-53. <https://doi.org/10.22435/hsr.v19i1.4988.41-53>
- Ningsih IK, Hastuti S. Study of prevention of mother to child transmission on antenatal care by independent midwifery clinic at Yogyakarta. *J Adm Kesehatan Indones*. 2018;6(1):61-7.
- Fabrigar LR, Petty RE, Smith SM, Crites SL. Understanding knowledge effects on attitude-behavior consistency: The role of relevance, complexity, and amount of knowledge. *J Pers Soc Psychol*. 2006;90(4):556-77. <https://doi.org/10.1037/0022-3514.90.4.556> PMID:16649855
- Rokhmah D, Khoiron. Pengetahuan dan Sikap Odha (Orang dengan HIV dan Aids dan Pencegahannya). *J IKESMA*. 2013;9(2):136-46. <https://doi.org/10.19184/ikesma.v13i2.7032>
- Nuzzillah NA, Sukendra DM. Analisis Pengetahuan dan Sikap Narapidana Kasus Narkoba Terhadap Perilaku Beresiko Penularan HIV/AIDS. *J Health Educ*. 2017;2(1):11-9.
- Iqbal S, Maqsood S, Zafar A, Zakar R, Zakar MZ, Fischer F. Determinants of overall knowledge of and attitudes towards HIV/AIDS transmission among ever-married women in Pakistan: Evidence from the Demographic and Health Survey 2012-13. *BMC Public Health*. 2019;19(1):793. <https://doi.org/10.1186/s12889-019-7124-3> PMID:31226969
- Yenie H, Risneni R. Upaya Pencegahan Transmisi Dari Ibu ke Anak pada Ibu Rumah Tangga Penderita HIV/AIDS di Kabupaten Pringsewu tahun 2010. *J Kesehatan Metro Sai Wawai*. 2012;5(1):1-8. <https://doi.org/10.22435/kespro.v6i3.4739.159-172>
- Rudra D, Khimananda B, Kamala A. Knowledge and awareness of pregnant women on HIV and AIDS in Butwal, Nepal. *J Public Health Epidemiol*. 2020;12(2):128-35. <https://doi.org/10.5897/jphe2020.1218>
- Andari S. People knowledge on HIV/AIDS. *Jurnal PKS*. 2015;14(2):211-24.
- Rahnama R, Rampal L, Lye MS, Rahman HA. Factors influencing students' attitude towards HIV/AIDS in a public university, Malaysia. *Glob J Health Sci*. 2011;3(1):128. <https://doi.org/10.5539/gjhs.v3n1p128>
- Platten M, Pham HN, Nguyen HV. Knowledge of HIV and factors associated with attitudes towards HIV among final-year medical students at Hanoi medical university in Vietnam. 2014;14:265. <https://doi.org/10.1186/1471-2458-14-576> PMID:24649918
- Wilda I. Pemanfaatan pelayanan voluntary counselling and testing (VCT) HIV Pada ibu hamil di wilayah kerja puskesmas langsung pekanbaru Tahun 2018. *J Photon*. 2019;9(2):48-59. <https://doi.org/10.37859/jp.v9i2.869>
- Arriza BK, Dewi EK, Kaloeti DV. Memahami Rekonstruksi Kebahagiaan pada Orang dengan HIV/AIDS (ODHA). *J Psikol Undip*. 2011;10(2):153-62.
- Umam H, Dewi YI, Elita V. Identifikasi Karakteristik orang Risiko Tinggi HIV dan AIDS tentang program pelayanan voluntary counseling and testing (VCT). *J Oonline Mahasiswa*. 2015;2(1):853-62.
- Higgins JA, Mathur S, Eckel E, Kelley L, Nakyanjo N, Sekamwa R, *et al*. Importance of relationship context in HIV transmission: Results from a qualitative case-control study in Rakai, Uganda. *Am J Public Health*. 104(4):612-20. <https://doi.org/10.2105/ajph.2013.301670> PMID:24524490
- Mahmoud MM, Nasr AM, Gasmelseed DE, Abdalhafiz MA, Elsheikh MA, Adam I. Knowledge and attitude toward HIV voluntary counseling and testing services among pregnant women attending an antenatal clinic in Sudan. *J Med Virol*. 2007;79(5):469-73. <https://doi.org/10.1002/jmv.20850> PMID:17385672
- Nutor JJ, Slaughter-Acey JC, Marquez SP, DiMaria-Ghalili RA, Momplaisir F, Oladimeji KE, *et al*. Impact of attitudes and beliefs on antiretroviral treatment adherence intention among HIV-positive pregnant and breastfeeding women in Zambia. *BMC Public Health*. 2020;20(1):1410. <https://doi.org/10.1186/s12889-020-09505-8> PMID:32938415
- Fitriani A, Shaluhayah Z, Suryoputro A. Stigmatization by midwives toward pregnant women with HIV and AIDS in Semarang city. *J Prom Kesehatan Indonesia*. 2013;8(1):79-89.
- King CC, Ellington SR, Kourtis AP. The role of



- co-infections in mother-to-child transmission of HIV. *Curr HIV Res.* 2013;11(1):10-23. <https://doi.org/10.2174/157016213804999258>  
PMid:23305198
24. Handayani L, Kristiana L. Faktor-faktor yang mempengaruhi keterjangkauan pelayanan kesehatan di puskesmas daerah terpencil perbatasan di kabupaten sambas (studi kasus di puskesmas sajingan besar). *Bul Penelitian Sistem Kesehatan.* 2012;15(3):223-31. <https://doi.org/10.22435/jpppk.v4i1.3312>
  25. Fitriani A, Shaluhiah Z, Suryoputro A. Stigmatisasi Bidan pada Ibu Hamil dengan HIV dan AIDS di Kota Semarang. *J Prom Kesehatan Indones.* 2013;8(1):11. <https://doi.org/10.14710/jpki.12.2.209-228>
  26. Karyadi TH. Keberhasilan Pengobatan Antiretroviral (ARV). *J Penyakit Dalam Indones.* 2017;4(1):1-3. <https://doi.org/10.7454/jpdi.v4i1.105>
  27. Setiyawati N, Meilani N. Determinan perilaku Tes HIV pada Ibu Hamil. *Kesmas.* 2015;9(3):201-6. <https://doi.org/10.21109/kesmas.v9i3.565>
  28. Az-Zahroh TN. Pengaruh Mutu Pelayanan Kesehatan Terhadap Tingkat Kepuasan Pasien Rawat Inap di Ruang Dewasa Umum Rumah Sakit X Kabupaten Gresik. *PSIKOSAINS.* 2017;12(2):99-111. <https://doi.org/10.32424/jeba.v21i4.1538>
  29. Elisa, Made PD, Sriningsih I. Pengalaman Ibu Yang Terdeteksi HIV Tentang Dukungan Keluarga Selama Persalinan di Jawa Tengah. *KEMAS.* 2012;8(1):37-43.
  30. Larasaty ND, Shaluhiah Z, Suryoputro A. Bentuk-Bentuk Dukungan Keluarga Terhadap Ibu dengan HIV Positif dalam Kepatuhan Terapi ARV di Kota Semarang. *J Prom Kesehatan Indones.* 2015;10(2):15. <https://doi.org/10.14710/jpki.14.2.108-121>
  31. Rahakbauw N. Dukungan Keluarga Terhadap Kelangsungan Hidup ODHA (Orang Dengan HIV/AIDS). *Open Science Framework, Preprint;* 2018. <https://doi.org/10.31219/osf.io/7j63d>
  32. Jendrius J, Indradin I. Praktik Sosial Pengasuhan Anak Terinfeksi HIV dan AIDS dalam Keluarga di Kota Padang: Studi EnamKeluarga dengan Anak Terinfeksi HIV/AIDS. *Fokus.* 2019;4(2):173-94. <https://doi.org/10.29240/jf.v4i2.1042>
  33. Sistirani C, Hariyadi B, Munasib M, Sari SM. Peran Keluarga dalam Pencegahan HIV/AIDS di Kecamatan Purwokerto Selatan. *J Ilmu Keluarga Konsumen.* 2018;11(2):96-107. <https://doi.org/10.24156/jikk.2018.11.2.96>
  34. Anshori MH. Pengaruh Perhatian dan Tingkat Pendidikan Orang Tua Terhadap Motivasi Belajar Siswa Pada Pelajaran Ekonomi. *OIKONOMI.* 2017;6(2):179-84. <https://doi.org/10.26740/jepk.v3n1.p103-114>
  35. Mokwena KE, Mbatha NL. Social and demographic factors associated with postnatal depression symptoms among HIV-positive women in primary healthcare facilities, South Africa. *Healthcare.* 2021;9(1):65. <https://doi.org/10.3390/healthcare9010065>
  36. Taylor S. *Health Psychology.* 6<sup>th</sup> ed. Singapura: McGraw Hill Book Company; 2006.
  37. Hughes N, Munoz-Guzman, *Understanding and Supporting Families with Complex Needs.* Basel, Switzerland: MDPI; 2016.