

Access to Treatment and Cultural Use for People Living with HIV and AIDS (PLWHA) During the COVID-19 Pandemic in the Special Region of Yogyakarta, Indonesia: An Anthropological Approach

Muhammad Dian Saputra Taher^{1*} and Atik Triratnawati¹

¹ Department of Anthropology, Universitas Gadjah Mada, Indonesia

* Muhammad Dian Saputra Taher, corresponding author. Email: muhammadian2017@mail.ugm.ac.id

Submitted: 23 March 2021, Accepted: 19 May 2022, Published: 28 June 2022
Volume 30, 2022. pp. 851–865. <http://doi.org/10.25133/JPSSv302022.047>

Abstract

During the COVID-19 pandemic, people living with HIV and AIDS (PLWHA) experienced various problems related to the continuity of treatment because lockdowns hamper their drug supplies. This study examined PLWHA's access to treatment to maintain their health during the COVID-19 pandemic, associated with traditional medicine well-known to Javanese people in Yogyakarta. Qualitative research was conducted in 2020 with online and offline focus group discussions and offline interviews with PLWHA from two NGOs in Yogyakarta, Indonesia. People living with HIV and AIDS had problems getting their medicine on time due to the limited availability. Drugs for a 30-day use were only enough for 15 days or even 10 days, especially at the beginning of the COVID-19 pandemic. They dealt with these drug supply delays jointly with other PLWHA borrowing drugs. To maintain their immunity, besides consuming vitamins, they also used Javanese herbal medicine they believed was effective for maintaining body fitness and immunity, and as alternative medicine besides medical drugs. The culture of Javanese people in Yogyakarta, who have long known herbal medicine contributes to shaping the PLWHA's view, found that they will turn to herbal medicine to improve immunity.

Keywords

Health; herbal; local culture; PLWHA; treatment

Introduction

The number of people living with HIV and AIDS (PLWHA) in the Yogyakarta Special Region [Daerah Istimewa Yogyakarta] (DIY) is alarming because it has increased. The total number of HIV and AIDS cases in this province in 2015 was 4,395 cases and increased to 5,237 in 2016, 5,709 in 2017, 6,367 in 2018, and 6,679 in 2019 (Yogyakarta City Government Public Health Office, 2016, 2017, 2018, 2019, 2020). The factors causing the increase in the number of people living with HIV and AIDS in the Special Region of Yogyakarta include unsafe sexual practices, joint use of narcotic syringes, and perinatal transmission (Ismiyanto, 2019).

Yogyakarta is one of the most popular culture-based tourist destinations in Indonesia. In addition, it is also a trendy place for students from all regions in Indonesia to continue their education because of the many high-quality universities in the area. The large number of migrants entering the Yogyakarta area makes the flow of mobility more significant so that meetings between communities are more substantial. The percentage of HIV and AIDS cases has also become relatively high because of its status as a dense city and visited by many people. Many immigrants, sex vendors, nightlife entertainment, and the proliferation of thousands of hotels and nightclubs in Yogyakarta have become one of the factors in the spread of HIV and AIDS (Listyawati & Suprayogo, 2018).

The number of people living with HIV and AIDS in the Special Region of Yogyakarta, known as 'Yogyakarta,' is increasingly concerning. In the last five years, the cumulative number of HIV and AIDS cases in DIY was 3,078 HIV cases and 1,239 AIDS cases in 2015; 3,688 HIV cases and 1,473 AIDS cases in 2016; 4,102 HIV cases and 1,485 AIDS cases in 2017; 4,765 HIV cases and 1,602 AIDS cases in 2018; and 5,134 HIV cases and 1,716 AIDS cases in 2019 (Yogyakarta City Government Public Health Office, 2016, 2017, 2018, 2019, 2020).

Based on data from 2017, the highest risk factors for HIV and AIDS in Yogyakarta were heterosexual 48%, Injecting Drug Use (IDU) 12%, transfusion 7%, homosexuality 6%, perinatal 3%, bisexual 1%, and unknown causes 23% (Yogyakarta City Government Public Health Office, 2017).

Of course, the increasing number of HIV and AIDS cases in Yogyakarta must be balanced with the provision of health facilities and services that ensure that PLWHA (People Living with HIV and AIDS) have the same access to treatment and care for other diseases. This requires serious handling from the local government to help PLWHA get the same access to treatment for people living with other diseases. Apart from taking antiretroviral (ARV) drugs, PLWHA also needs to make additional efforts to maintain their health and keep their body healthy and fit. Antiretroviral drugs work by eliminating elements required by HIV to multiply and prevent HIV from destroying CD4 cells (Kemala, 2021). Therefore, Yogyakarta should be prepared to provide all the needs of PLWHA during their treatment at various health service providers, such as hospitals and health centers.

In addition to access to ARVs, PLWHA should also routinely carry out laboratory checks for Viral Load (VL) and Cluster of Differentiation 4 (CD4). Viral Load can provide information on how much HIV in the body of PLWHA has been suppressed. A suppressed viral load means the amount of virus in the body is very low; this means that ARV treatment has succeeded in controlling the HIV in the body of PLWHA so that it does not transmit HIV to others (Rokom, 2021). The CD4 test is a blood test to determine how well the condition of a

person's immune system who has been diagnosed with HIV infection is. This test measures the number of white blood cells (CD4+). These white blood cells play an essential role in fighting disease with disease-causing germs, so the lower the CD4+ cell count, the stronger the infection from HIV. As a result, the immune condition is getting weaker because the CD4 value in the body is not at expected levels between 500–1,200 cells/mm³ (Kemala, 2021).

People with HIV also have higher rates of certain health conditions. Older age and underlying health conditions can make people more likely to become seriously ill, such as if they become infected with COVID-19. This is particularly true for people with advanced HIV or people with HIV who are not being treated (Center for Disease Control and Prevention, 2022). People living with HIV and AIDS must continue to take ARVs with a high level of adherence to maintain good immunity and maintain low levels of actively replicating the virus. However, the COVID-19 pandemic has impacts, including the disruption in providing treatment services, reduced availability of ARV drug supplies, delays in drug distribution, and various psychological issues (Task Force for Handling COVID-19, 2020)

The COVID-19 pandemic requires PLWHA to make various adjustments. Antiretroviral drugs are the only hope for PLWHA to survive by reducing the amount of HIV in their body. However, access to ARV drugs has also been hampered due to the pandemic, causing PLWHA to receive 30-day use drugs for 15-day or even 10-day use only. This raises concerns about the safety of being infected with COVID-19 for PLWHA because they have to repeatedly come to health care facilities to pick up medicine, especially those in the COVID-19 red zone area (Task Force for Handling COVID-19, 2020). People living with HIV and AIDS experience this drug rationing in Yogyakarta, whose entire area has been included in the COVID-19 spread zone. The Special Region of Yogyakarta has made several adjustments in treatment services for PLWHA, including online registration for receiving drugs to reduce physical contact, dividing the drugs into smaller dosages, and delivery services for PLWHA who cannot come to health service centers.

During the COVID-19 pandemic, the use of traditional alternative medicine tends to be increasing. It is necessary to investigate the use of traditional medicine among PLWHA to find the relationship between adherence to treatment and the types of treatment (traditional, medical, or some combination of both). Based on this realization, it is necessary to adjust the treatment patterns accessed by PLWHA during the COVID-19 pandemic to minimize the risk of contracting COVID-19.

No research on the impact of the COVID-19 pandemic on people living with HIV and AIDS in Indonesia was found when this present study was carried out. A previous study examined the PLWHA response to COVID-19 by assessing their care and treatment adherence. The COVID-19 pandemic situation is impacting access to ARV treatment in sub-Saharan Africa. The impact of travel restrictions during the COVID-19 pandemic can be even more detrimental to PLWHA, considering the long distances to access treatment due to the limited availability of special HIV services, higher preference for health facilities, and efforts to reduce social stigma problems related to their illness (Nyoni & Okumu, 2020). Another study describes the current and possible future impacts of COVID-19 and invites other stakeholders to respond to the effects of COVID-19 in the context of HIV and AIDS prevention and treatment (Chenneville et al., 2020). The COVID-19 pandemic presents an additional burden to PLWHA's physical, emotional, and social wellbeing due to ineffective health care services and access to treatment. Therefore, this present study examined PLWHA's access to treatment to maintain health during the COVID-19 pandemic, which was associated with traditional medicine well-known to Javanese people.

Methods

Data collecting

This study used primary qualitative data from direct interviews and focus group discussions (FGD). The data collection was carried out from June to August 2020, including the preparation, data collection, and data processing stages. Offline interviews with five PLWHA assisted by NGO VP in the Yogyakarta Special Region were conducted.

The interviews with the informants were carried out by following the COVID-19 preventive health protocol, including both the researchers and the informants wearing masks throughout the interview process, washing their hands on their arrival at the meeting place, keeping the distance between them at around two meters, and refraining from touching each other. The criteria for selecting informants included living with HIV and AIDS or having a family member with HIV and AIDS and residing in the Special Region of Yogyakarta. To acquire additional data, interviews were also conducted with two HIV and AIDS NGOs, which were also located in the Special Region of Yogyakarta.

Data were collected through focus group discussions (FGDs) online with one PLWHA group and offline with one PLWHA; different HIV and AIDS NGOs assisted these groups. The interview with the second group was carried out offline because the informants came from the lower social class and did not have access to either a laptop, personal computer, or smartphone. The number of participants who took part in the first FGD was six, while the second FGD was five. No participants took part in both FGDs. All the FGD participants were PLWHA who live in and have access to medical treatment in the Yogyakarta Special Region. The online FGD was conducted on the Google Meet platform, and the participants joined the discussion from their respective homes. In contrast, the offline FGD was conducted at NGO K's office and guided by the researchers who acted as discussion triggers. The interviews and focus group discussions were conducted after obtaining approval from PLWHA and by meeting at a mutually agreed time by bringing research permission.

A literature study was also done to substantiate the field data. The researchers searched scientific articles from various journals that examine topics relevant to the study at hand. The literature study results added to the data related to the impacts of COVID-19 on PLWHA in areas other than the Yogyakarta Special Region. Secondary data were used as supporting data to sharpen the analysis.

This research was approved by the Research, Community Service, Cooperation, and Alumni of the Faculty of Cultural Science, Gadjah Mada University (No. 2098 / UN1.FIB / UP2M / 2020), and permission was obtained from the two non-government organizations (NGOs) providing resource persons. Therefore, this research has been considered feasible to collect data according to the applicable provisions during the COVID-19 pandemic.

Data analysis

This data analysis used an anthropological approach with an interactive analysis model, which divides the analysis activities into several parts, namely data collection, data reduction, data display, and conclusion (drawing/verifying) (Miles & Huberman, 1992). Based on this

procedure, the data analysis in this present study was carried out in the following stages: (1) recording all findings of problems/phenomena in the field gathered through interviews, FGDs, and documentation; (2) reviewing the interview transcripts, FGD transcripts, and the results of the literature study then separating/categorizing the data that are considered essential to or answering the research problem; this stage was repeated to check for classification errors; (3) describing the data that have been classified/categorized by paying attention and adjusting to the focus of the research problem and objective; and (4) carrying out the final analysis by verifying the data obtained in the final stage and interpreting the data in the form of a research article.

Results

The impact of the COVID-19 pandemic on PLWHA's access to treatment in Yogyakarta

Table 1 displays the profiles of the interviewees and focus group discussion (FGD) participants, who are all people living with HIV and AIDS (PLWHA) in the Special Region of Yogyakarta. With such diverse resources, data about PLWHA's access to treatment and their efforts to maintain health during the COVID-19 pandemic in the Special Region of Yogyakarta were found.

Table 1: Profile of PLWHA Informants

No.	Name (Initials)	Occupation	Gender	Years of Taking ARV
1	EB	HIV and AIDS peer support group mentor	Male	3
2	PT	Unemployment	Female	4.5
3	SM	Factory worker	Female	1.5
4	BN	HIV and AIDS peer support group mentor	Male	13
5	SR	Tailor	Female	5
6	AR	HIV and AIDS peer support group mentor	Male	6
7	BD	HIV and AIDS peer support group mentor	Male	3
8	HR	HIV and AIDS peer support group mentor	Male	8
9	RZ	HIV and AIDS peer support group mentor	Male	7
10	RY	HIV and AIDS peer support group mentor	Male	4.5
11	HE	HIV and AIDS peer support group mentor	Male	6
12	FS	HIV and AIDS peer support group mentor	Male	1
13	WN	Motorcycle Taxi Driver	Male	1
14	RA	Unemployment	Male	11
15	DS	Unemployment	Male	10
16	ST	Employee	Male	4

Note: Interviews and Focus Group Discussions, 2020

The impact of work and the economic donations

A socioeconomic impact experienced by PLWHA is often termination of employment, as shared by PT. This resulted from the PT's workplace, which experienced a sharp decline in income and even lost money so that it was temporarily closed for an undetermined period. In addition, EB, BN, WA, and YI also experienced a decrease in revenue due to reduced subscribers. On participant, EB, an employee who has a side job selling food and daily necessities (EB), experienced a significant reduction in income. On the other hand, BN had a side job, and WA, as the primary job of an online motorcycle taxi driver, also felt the same way. Due to the call to quarantine, the number of passengers received in a day was significantly reduced. The small number of passengers made BN and WA's income as online motorcycle taxi drivers decrease, so they could no longer meet their daily needs. Another participant, RA, used to be a performer who actively traveled everywhere to try his luck. Still, due to the pandemic, the activities of street performers stopped, and his health condition worsened. In addition, YI, who works as a tailor, also lost customers though it had little effect on his income.

During the COVID-19 pandemic, affected PLWHA received donations from various parties, including the government, private parties (foundations), and even hospitals. The donations varied from daily necessities, health support, masks, and cash. Of course, this is very helpful for the needs of PLWHA, considering that the socioeconomic impact of the pandemic has also been felt significantly. The donations for daily needs are obtained by all PLWHA selected with specific criteria by the aid provider, such as the elderly, children, and the poor. The daily necessities provided in the form of conditions of life include rice, cooking oil, sugar, soap, toothpaste, and so on.

Furthermore, the donations provided are in the form of health supplements that are useful for maintaining the nutrition of PLWHA to remain well supplied during the pandemic. The donations provided were multivitamins to protect the body's stamina, vitamins to increase appetite, milk, cold medicine, and herbs. In addition, PLWHA also received donations in the form of cash from the government and the private sector to meet their daily needs and donations for foundations that accommodate abandoned PLWHA in Yogyakarta.

The impact on access to HIV and AIDS treatment

Based on the results of interviews with PLWHA, it was found that there were obstacles in accessing ARV drug services or laboratory checking for CD4 and viral load. However, this did not occur in all medical service centers in the Special Region of Yogyakarta. Focus group discussion participants also said that they had similar problems. During the COVID-19 pandemic, the problems PLWHA faced included the operational time in HIV and AIDS treatment centers that were significantly reduced and the access to ARV drugs that was limited due to delays of supply from the government so that the stocks in health centers [puskesmas] and hospitals were running low. This affected the distribution of ARV drugs, for which the 30-day usage drugs that used to be given to PLWHA once a month were then divided to be delivered in several terms.

An informant revealed that they received ARV drugs every ten days, while before the pandemic, they used to get them once a month. Other PLWHA were given the ARV drugs on a 15-, 7-, or even 3-day basis. However, this condition did not last long. The problem with

access to ARV drugs was mainly felt at the beginning of the COVID-19 spread in Indonesia, which was from March to April 2020. The limited supplies of ARV drugs made PLWHA more careful in carrying out their daily activities for fear of being infected with COVID-19. As suggested in the following statement, the informant EB also experienced difficulties accessing treatment.

"Regarding treatment, there are certainly some problems during this pandemic. Since the problem relates to health services, accessing ARV is shortened, resulting in delays in the ARV supplies. Consequently, some of us were given ARV for 7-day usage only, some for 15 days, while we used to get them for 30-day usage."

(Interview with EB, 2020)

The PLWHA's access to laboratory services for CD4 and viral load checking was also hampered. This obstacle was felt from March to July 2020 by PLWHA in the Special Region of Yogyakarta. This happened because laboratories in the hospitals prioritized checking COVID-19 samples, so laboratory services for PLWHA were temporarily suspended. However, the CD4 and viral load checking could still be done at the Yogyakarta Health and Calibration Laboratory Centre, while Dr. Sardjito Hospital laboratory could not be accessed until July 20, 2020. This resulted in CD4 and viral load checking delay to PLWHA, who used to be routinely checked for CD4 and viral load on a six-monthly basis. This certainly made PLWHA worried because laboratory checking is vital to limit the amount of virus in their body. This resulted in the accumulation of CD4 and viral load checking scheduled at the end of July.

During the COVID-19 pandemic, PLWHA could register to pick up ARV drugs from the hospital online so that they do not need to queue for the ARV drugs and thus minimize close contact with many people. This is meant to protect PLWHA, who tend to be more vulnerable to COVID-19 because of their low immunity. In an interview with an HIV and AIDS NGO, it was revealed that there were delivery services available for PLWHA who could not find time to go to medical services providers or were sick, so they could not leave their house. These drug delivery service providers usually work with peer support groups [kelompok dukungan sebaya] from HIV and AIDS NGOs. People living with HIV and AIDS pay the delivery cost to the delivery person. Many PLWHA felt helped with this kind of service, although not all PLWHA took advantage of the service.

Gotong Royong, build solidarity among PLWHA and medical guarantee

In the case of ARV drug supplies shortage in the Special Region of Yogyakarta during the COVID-19 pandemic, the culture of *gotong royong* [working together to get things done; this term comes from the Javanese words *gotong*, which means "to lift" and *royong*, which means "together"] among PLWHA seemed to be very strong. This attitude could be seen in PLWHA borrowing drugs from each other during the shortage of ARV stocks at health centers and hospitals. When PLWHA's ARV drug stock ran out, while the supply at the health centers or hospitals also ran out, they had to find a way to keep the treatment from being interrupted by borrowing medicine from their fellow PLWHA friends. Once the stock of drugs at the health center was available again, they would return the ARV drugs they borrowed to the lender at the same amount. However, this usually occurred for a short period, only three to four days. Such cases were also sporadic. Of the 11 participants in the focus group discussions, only two

people experienced borrowing drugs from their fellow PLWHA. *Gotong royong* is a unique cultural solution for dealing with the problem of minimal access to treatment during the COVID-19 pandemic among PLWHA in the Special Region of Yogyakarta.

The guarantee for access to treatment for PLWHA is the ownership of Badan Penyelenggara Jaminan Sosial [Social Security Administering Body] (BPJS) insurance from the Indonesian government. With this insurance, PLWHA will be no longer burdened with medical expenses for ARV drugs or laboratory checking for CD4 and viral load. However, this might not be shared by all PLWHA. This study found an informant who had to pay a registration fee of 78,000 IDR or around 5.35 USD every time he took the ARV drugs during the COVID-19 pandemic.

One participant, PW, was laid off from work due to the COVID-19 pandemic, so he had no income and thus was no longer able to pay the monthly BPJS insurance premium. Fortunately, this PLWHA could still access ARV drugs with financial assistance from the extended family so that he did not have to deal with the problem of getting fewer drugs.

“During this pandemic, I could not afford to pay the BPJS insurance premium. I used to use it, but now I use the public scheme. It’s OK. I think this condition is temporary only. I will pay it back later. I had to borrow money to pay the registration fee at Dr. Sardjito Hospital for four months.”

(Interview with PW, 2020)

Based on the description above, it can be seen that the COVID-19 pandemic impacted PLWHA in accessing treatment, including the depletion of the ARV drugs stock in health services centers, which in turn affected the distribution of the drugs to PLWHA. The distribution had to be divided into several terms in one month rather than once a month as it used to be. In addition, the temporary closure of hospital laboratories resulted in long delays in CD4 and viral load checking. It is essential to regularly check the amount of virus in their bodies. Besides, there are changes in the mechanism for receiving drugs at health care centers because they have to follow the conditions and protocols for preventing COVID-19. Some PLWHA had to deal with financial constraints to accessing medicines. Because the resilience of PLWHA amid the COVID-19 pandemic must be high, there is a need for additional efforts to maintain health to stay healthy and fit in carrying out their daily activities.

Cultural aspects in maintaining PLWHA’s health during the COVID-19 pandemic

In this study, all informants and FGD participants raised concerns about being exposed to COVID-19 because of their susceptibility to infections. Low immunity makes PLWHA take various measures to stay healthy and fit in daily activities. From their information, it is known that none of the informants had their health condition deteriorate during the COVID-19 pandemic. Apart from taking ARV drugs regularly, PLWHA also does various activities and tries additional treatments. During the COVID-19 pandemic, PLWHA make every effort to follow the health protocols outside their home or interacting with others. Therefore, PLWHA must be well-informed about COVID-19 prevention to protect themselves against the threat of contracting the virus and contracting another virus for which neither a cure nor a vaccine has been found causes profound concern because it is inconceivable for them to be infected with two viruses, HIV and COVID-19.

The COVID-19 pandemic requires PLWHA to find ways to maintain their health apart from taking ARV drugs. People living with HIV and AIDS have made various efforts, ranging from medical knowledge-based efforts to cultural belief-based efforts. Medical-based efforts are the standard solutions for PLWHA to maintain their physical health. They choose to take additional vitamin supplements to stay fit. Vitamin supplements come in various forms, including tablets, caplets, pills, and syrups. All informants in the study take vitamin supplements they obtain independently or from others.

During the COVID-19 pandemic, they all receive assistance to fulfill their daily needs plus vitamin supplements, which are either directly given to them or through the shelter for neglected PLWHA. The aid comes from the government and the private sector with programs targeting HIV and AIDS people. The assistance does not only come from within the country but also from abroad. The two interviewed NGOs revealed that they received financial and material aid for PLWHA from several international HIV and AIDS organizations. Vitamin supplements are among the most preferred alternatives to maintain PLWHA's health amid the COVID-19 pandemic.

Another effort PLWHA in Yogyakarta Special Region have made to maintain their health is consuming traditional herbal medicine. As part of the Javanese people familiar with herbal medicine, PLWHA certainly includes *jamu* [traditional herbal medicine] to maintain their health even though their primary medicine is ARV. *Jamu* has become an inseparable part of the life of the Javanese people, regardless if they are PLWHA or not. *Jamu* is considered an effective alternative medicine to heal or protect the body from illness. The concept of illness and disease for PLWHA has changed in that while they are aware that they have HIV and AIDS, they would only consider themselves ill when they suffer from diseases other than HIV and AIDS. It has become part of their lives, and they will stay together until death.

To prevent themselves from being exposed to other diseases, they turn to herbal medicine as an effective solution. The herbal medicine most consumed by PLWHA is *wedang uwuh*. *Wedang* in the Javanese language means a drink, while *uwuh* means garbage. The naming of *wedang uwuh* is based on the ingredients of this particular drink that look like garbage when brewed. Various types of herbal plants in *wedang uwuh* include cinnamon, cloves, ginger, rock sugar, *secang* [*biancaea sappan*], lemongrass, cardamom, and nutmeg. Various *wedang uwuh* preparations range from packaged in whole ingredients to powdered form. *Wedang uwuh*, a traditional drink (*jamu*) typical of the Special Region of Yogyakarta, is very easy to find in the traditional markets, home stalls, and modern supermarkets.

Wedang uwuh is a local cultural product that is very useful for health maintenance. The informants argued that the benefits they feel from consuming *wedang uwuh* include, among others, bringing warmth to the body, relieving soreness and fatigue, preventing as well as curing colds, and making the body refreshed. We need hot water to brew *wedang uwuh* to release the aroma and the substances contained in the spices. The effect felt after drinking it is that the body will feel warm due to the spicy sensation. The body feels refreshed, so it seems no adverse side effects are resulting from consuming this particular beverage. *Wedang uwuh* is also part of the assistance provided by NGOs to PLWHA; each of them receives a package of 20 packets. This suggests that NGOs in the Special Region of Yogyakarta have faith in the cultural aspect of helping PLWHA maintain their health. Therefore, alternative, traditional medicine as a companion to medical treatment is becoming increasingly popular and has become a trend among PLWHA, especially during the COVID-19 pandemic.

Apart from *wedang uwuh*, the traditional drinks (*jamu*) consumed by PLWHA include *kunir-asm* [a drink made of turmeric and tamarind plus water], *beras kencur* [a drink made of mashed kencur (*Kaempferia galanga*) and rice combined with water], and other homemade herbal medicines. All these herbal preparations have a similar benefit in maintaining body fitness. To date, herbal medicine is still preserved as a wealth of local wisdom. People living with HIV and AIDS prefer to consume homemade herbal medicines because they are prepared with no preservatives and thus fresher and healthier when served. For Indonesian people, herbal medicines are not merely traditional, efficacious ingredients. Since ancient times, their ancestors have strived to preserve nature by utilizing components from nature and encouraging them to replant the taken plants for future use. Affordable prices, ease to obtain, and qualified properties make herbal medicine the *prima donna* of alternative treatment options during the COVID-19 pandemic, especially in maintaining body fitness so as not to get sick.

Furthermore, PLWHA participating in this study no longer used cultural rituals such as magical ceremonies or shaman services as part of HIV and AIDS treatment. People living with HIV and AIDS believe that the best way to stay healthy and survive as a person living with HIV and AIDS is to regularly take the ARV and other supporting drugs that make them feel healthier. They also believe that there is no effective medicine to date to cure them, and ARV drug's efficacy is limited to suppressing the amount of HIV in their body. Ritual-based treatment is thus not an appropriate solution.

The findings suggest that the cultural aspects revealed in this study indicate closeness between PLWHA and their local culture. The culture of drinking traditional herbal medicine is still firmly held by PLWHA, which is influenced by the identity of the Yogyakarta people, who uphold their ancestral heritage. *Jamu* is an inseparable part of the life of the Javanese people. For PLWHA, several of the many types of herbal medicine can be consumed as part of efforts to maintain health during the COVID-19 pandemic. Although not all cultural elements are part of traditional medicine as a companion to medical treatment, culture still plays a vital role in the survival of PLWHA in the Special Region of Yogyakarta

Discussion

Access to treatment during the COVID-19 pandemic is critical for PLWHA. The availability of ARV drugs is an essential factor in determining their health and survival (Logie, 2020). The obstacles PLWHA experience in accessing treatment must be addressed immediately because it could cause them to face the risk of 'temporarily' stopping taking drugs that can harm their health. In addition, all informants think that PLWHA must also make an extra effort to keep their bodies healthy by taking additional vitamin supplements and traditional herbal medicine. Medical and cultural aspects are two things that go hand in hand as an offer for PLWHA to maintain health amid the COVID-19 pandemic.

Based on the above, the adaptation carried out by PLWHA is to include cultural elements in the form of the consumption of herbal medicine *wedang uwuh*, which is a local tradition of the local community, and the application of a culture of lending ARV drugs to each other to overcome the problem of limited stocks running low in health services. Medical traditions and values of solidarity built based on kinship can be found in every culture and carry a symbolic meaning concerning cultural influences on mental, psychological, and socioeconomic health and fitness (Penkala-Gawecka, 2017).

Consumption of *wedang uwuh* is interpreted by PLWHA as part of an effort that they believe can maintain health and body fitness during the COVID-19 pandemic. A strong belief in the health effects of consuming herbal medicine makes suggestions to the body of PLWHA to work optimally when consuming the *wedang uwuh*; of course, in this case, psychological factors have a significant role. Consumption of *wedang uwuh* is also influenced by social aspects because many PLWHA feel the positive impact of drinking herbal medicine. Another PLWHA is also followed because the environment among PLWHA influences consumption motivation (Winkelman, 2009). Treatment options are integrated into beliefs and values closely linked to the cultural features of that society's social system.

The limited access to treatment for PLWHA during the COVID-19 pandemic is part of the government's power mechanism to control the spread of the COVID-19 outbreak as part of efforts to save everyone (Shiau et al., 2020). Indirectly, PLWHA are the victims of the government policy regarding COVID-19, which requires adjustments in the treatment mechanism. It is feared that the higher frequency of picking ARV drugs would increase the risk of PLWHA being exposed to COVID-19 because their immune conditions tend to be weaker than non-sufferers. Frequent drug picking also impacts their economic life because some PLWHA have to use public transportation to access health services, so the more often they go, the greater the costs they have to bear. Meanwhile, the obstacles existing before the COVID-19 pandemic, like the general public's negative stigma against PLWHA, have not been fully resolved. More education and socialization are provided to the general public to not discriminate against PLWHA.

Moreover, some PLWHA still do not receive the best treatment because health providers still hold a negative view of HIV and AIDS, which affects their psychological condition. Therefore, the problems arising from the COVID-19 pandemic only add to the long list of the existing issues. People living with HIV and AIDS are faced with limited drug supplies and concerns about their susceptibility to COVID-19 exposure.

Meanwhile, some people acutely need access to services, the providers of which are now closed, and to drugs, the stock of which is running low due to the domino effect of what is happening. It can be seen from these cases that health-related cultural values, knowledge, and behaviors form a cultural system that is holistically and logically integrated with the medical service system (Korkmaz Yaylagül & Yazıcı, 2018). Problems related to health and disease cannot be separated from social life, and thus the response provided to PLWHA can be in the form of cultural solutions. The health service system is part of the cultural aspects shaped by the community and relates to the authorities' social, political, and economic factors. When a pandemic occurs like what is happening now, the rules or policy regulators can reproduce and replicate the existing health service system with adjustments in various medical aspects because handling COVID-19 must take precedence.

Reflecting on the alternative treatment PLWHA in the Special Region of Yogyakarta use, cultural elements are incorporated into it, namely by consuming herbal medicine *wedang uwuh*, which is a legacy of local wisdom of the local community and implementing the culture of *gotong royong* by borrowing ARV drugs from each other to overcome the problem of drug stock that is running low or even not available at health service centers. Similar treatment traditions and *gotong royong* values can be found in every culture and carry symbolic meaning by referring to cultural influences at the mental, psychological, and social health and fitness levels (Penkala-Gawecka, 2017).

People living with HIV and AIDS interpret *wedang uwuh* consumption to maintain their health and fitness. A strong belief will get the maximum health effect when herbal medicine suggests making the bodywork optimally. In such a case, psychological factors certainly play a significant role. The consumption of *wedang uwuh* is also influenced socially because fellow PLWHA influence each other's motivation to consume them. Because many PLWHA felt the positive impact of drinking the herbs, other PLWHA follows suit. The choice of this particular treatment pathway is integrated into a complex network of beliefs and values closely related to the cultural and historical features of the social systems that are integral parts of their society.

In this case, it is evident that *wedang uwuh* has been part of the Yogyakarta people's lives as a traditional medicine to maintain body fitness is still believed and used to date, especially in the context of HIV and AIDS treatment support. The use of traditional medicine cannot be separated from Yogyakarta, which is known as a region with solid medical pluralism where traditional and medical treatments coexist and complement each other (Triratnawati, 2019). People living with HIV and AIDS choose traditional medicine as an alternative only because they prioritize medical treatment, while traditional medicine is used simultaneously to complete (Friðbjófsdóttir, 2014).

From an anthropological point of view, the critical role of the sociocultural context in shaping the experience of health and disease, and people's medical choices is so clear that it is not even considered trivial by PLWHA. Access to treatment and cultural efforts to maintain health can undoubtedly emphasize social constructiveness through PLWHA's understanding of health problems described through social and cultural roles in defining, interpreting, and responding to HIV and AIDS (Nyoni & Okumu, 2020). The culture-based handling of the disease they suffer forms positive psychological and emotional perception of their body, affecting individual achievement and experience in alternative treatment (Winkelman, 2009).

The depletion of drug stock availability impacts the distribution of drugs to ensure that all PLWHA can access them. However, this has had a domino effect. Before the pandemic, the amount of medicine that PLWHA used was sufficient for a one-month use in each picking. During the COVID-19 pandemic, they should receive more prescriptions in each selection, for example, enough for two- or three-month use to minimize contact with other people. However, what happens is the opposite. They have to take the drugs two or three times a month. This increases PLWHA's chance to interact with many people. The delivery services offered by peer assistants from the Peer Support Group in an HIV and AIDS NGO are not utilized by many PLWHA. Based on this, medical support for PLWHA during the COVID-19 pandemic can be community-based, as with the HIV and AIDS NGOs in the Special Region of Yogyakarta. This way, NGOs can help deliver ARV drugs to PLWHA or allow them to register to get their drugs without queuing.

This study also illustrates that the effect of the alternatives PLWHA choose, such as traditional herbal medicine, is comparable to that of ARV drugs provided by health services. The COVID-19 pandemic also impacts the social environment and policy landscape, making the country prioritize suppressing the speed of COVID-19 spread without compromising other services with similar urgency (Cabello et al., 2020). People living with HIV and AIDS treatment support include digital-based support services (including online registration for drug picking), supplements (vitamins and traditional herbal medicine), and improved health protocols to minimize COVID-19 infection. Above all that, PLWHA has to be prepared for a possible disruption in treatment services because the health facilities are more focused on

taking care of COVID-19 patients. People living with HIV and AIDS must make more efforts to anticipate the worst potential risk of the COVID-19 pandemic.

Conclusion

This study found that concerning PLWHA access to treatment, the COVID-19 pandemic affected the availability of ARV drug stocks, which caused PLWHA to experience an adjustment in getting ARV drugs, from used to be once a month to more often (once every 15 days, once every ten days, or even once every three days). Fortunately, this condition did not last long, and the drugs are now available at all health care centers in the Yogyakarta Special Region. People living with HIV and AIDS, which are vulnerable to COVID-19, require extra efforts to maintain their health. Vitamins are the supplements of choice for all PLWHA as complements to medical drugs. Besides, cultural practices are still done by PLWHA in the Special Region of Yogyakarta to maintain health. This can be seen from the findings that PLWHA also consumes Yogyakarta's traditional herbal medicine, *wedang uwuh*, which is believed to protect the body's immunity to complement medical treatment. The study also found *gotong royong* between PLWHA in the form of borrowing drugs from fellow PLWHA when the stock of ARV drugs in health care facilities is running low or even empty. Access to treatment and cultural efforts to maintain health by PLWHA can emphasize social constructiveness through understanding health problems described through social and cultural roles in defining, interpreting, and responding to HIV and AIDS.

Anthropologically, PLWHA is described as part of a community system that holds values and meanings of the culture of consumption (in traditional medicine and the application of *gotong royong* value), which focuses on becoming healthier and more humane among fellow PLWHA. The cultural elements deeply embedded in Javanese society are followed by PLWHA to maintain health. The COVID-19 pandemic requires PLWHA to find medically and culturally ways to protect themselves from being infected with the new virus. The state must keep the right balance between protecting the public from catching COVID-19 and ensuring that PLWHA treatment is uninterrupted whatsoever, even only temporarily. The government, NGOs, and other parties must ensure that people with HIV and AIDS are offered the same access to medical services. The HIV and AIDS-related services must be continuously provided without any interference to maintain the health and life of PLWHA.

Acknowledgments

The author would like to thank the Faculty of Cultural Science, Universitas Gadjah Mada, HIV and AIDS NGOs in the Special Region of Yogyakarta, informants, all participants, and focus group discussions for their support and helpful comments.

References

Cabello, A., Zamarro, B., Nistal, S., Victor, V., Hernández, J., Prieto-Pérez, L., Carrillo, I., Álvarez, B., Fernández-Roblas, R., Hernández-Segurado, M., Becares, J., Benito, J. M., Rallón, N., Téllez, R., Castaño, Á. L., Herrero, A., & Górgolas, M. (2020). COVID-19 in people living with HIV: A multicenter case-series study. *International Journal of Infectious Diseases*, 102, 310–315.

<https://doi.org/10.1016/j.ijid.2020.10.060>

Center for Disease Control and Prevention. (2022). *HIV and COVID-19 Basics*. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/hiv.html>

Chenneville, T., Gabbidon, K., Hanson, P., & Holyfield, C. (2020). The impact of COVID-19 on HIV treatment and research: A call to action. *International Journal of Environmental Research and Public Health*, 17(12), Article 4548. <https://doi.org/10.3390/ijerph17124548>

Friðþjófsdóttir, S. (2014). *Alternative medicine: The role and meaning of ritual in the placebo effect*. (Published Bachelor's thesis, University of Iceland). Skemman. <https://skemman.is/bitstream/1946/18035/1/skemma.pdf>

Ismiyanto, A. (2019, March 12). *Penyebab terbesar penularan HIV dan AIDS di DIY karena faktor seks bebas* [The major cause of HIV and AIDS transmission in DIY is free sex]. Tribune Jogja. <https://jogja.tribunnews.com/2019/03/21/penyebab-terbesar-penularan-hiv aids-di-diy-karena-faktor-seks-bebas>

Kemala, F. (2021). *Tes CD4 [CD4 Test]*. Hello Health Group. <https://hellosehat.com/seks/hiv aids/cd4/>

Korkmaz Yaylagül, N., & Yazıcı, S. (2018). The perceptions of elderly Turkish immigrants of health care systems in their home and host countries: A field study focused on Denmark, Britain, and Germany. *Toplum ve Sosyal Hizmet*, 29(2), 34–50. <https://dergipark.org.tr/en/pub/tsh/issue/39687/469961>

Listyawati, & Suprayogo, R. (2018). DIY Rentan Terhadap HIV dan AIDS [DIY is vulnerable to HIV and AIDS]. *Media Informasi Penelitian Kesejahteraan Sosial*, 42(2), 115–130. <https://doi.org/10.31105/mipks.v42i2.2238>

Miles, M., & Huberman, A. M. (1992). *Analisis Data Kualitatif* [Qualitative Data Analysis]. UI Press. <https://opac.perpusnas.go.id/DetailOpac.aspx?id=298242>

Nyoni, T., & Okumu, M. (2020). COVID-19-compliant strategies for supporting treatment adherence among people living with HIV in sub-Saharan Africa. *AIDS and Behavior*, 24(9), 2473–2476. <https://doi.org/10.1007/s10461-020-02888-0>

Penkala-Gawecka, D. (2017). Perceptions of health and illness, and the role of healers in Kyrgyzstan. *Public Health Panorama*, 3(1), 80–87. <https://apps.who.int/iris/handle/10665/254728>

Rokom. (2021, January 20). *Kampanye Bulan Viral Load: Pentingnya Mengetahui Status Pengobatan ARV pada ODHA Melalui Pemeriksaan Viral Load HIV* [Viral Load Month Campaign: The Importance of Knowing the Status of ARV Treatment for PLWHA through HIV Viral Load Examination]. Sehat Negeriku. <https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20200929/0735086/kampanye-bulan-viral-load-pentingnya-mengetahui-status-pengobatan-arv-odha-melalui-pemeriksaan-viral-load-hiv/>

Shiau, S., Krause, K. D., Valera, P., Swaminathan, S., & Halkitis, P. N. (2020). The burden of COVID-19 in People Living with HIV: A Syndemic Perspective. *AIDS and Behavior*, 24(8), 2244–2249. <https://doi.org/10.1007/s10461-020-02871-9>

Task Force for Handling COVID-19. (2020, July 9). *Tantangan Pengobatan Penderita ODHA di Tengah Pandemi COVID-19* [The Challenge of Treatment of People with PLWHA in the Midst of the COVID-19 Pandemic]. Satuan Tugas Penanganan COVID-19. <https://covid19.go.id/p/berita/tantangan-pengobatan-penderita-odha-di-tengah-pandemi-covid-19>

Triratnawati, A. (2019). *Pengobatan Tradisional di Tengah Modernisasi Dunia Medis* [Traditional Medicine in the Midst of Modernization of the Medical World]. *Prolog Pengobatan Tradisional di Era Modern* [Traditional Medicine in Modern Era]. Pustaka Pelajar.

Winkelman, M. J. (2009). *Culture and health: Applying medical anthropology*. Jossey Bass.

Yogyakarta City Government Public Health Office. (2016). *Profil Kesehatan Tahun 2016: Kota Yogyakarta (Data Tahun 2015)* [2016 Health Profile: Yogyakarta City (2015 data)]. [Data set]. https://kesehatan.jogjakota.go.id/uploads/dokumen/profil_dinkes_2016_data_2015.pdf

Yogyakarta City Government Public Health Office. (2017). *Profil Kesehatan Tahun 2017: Kota Yogyakarta (Data Tahun 2016)* [2017 Health Profile: Yogyakarta City (2016 data)]. [Data set]. https://kesehatan.jogjakota.go.id/uploads/dokumen/profil_dinkes_2017_data_2016.pdf

Yogyakarta City Government Public Health Office. (2018). *Profil Kesehatan Tahun 2018: Kota Yogyakarta (Data Tahun 2017)* [2018 Health Profile: Yogyakarta City (2017 data)]. [Data set]. https://kesehatan.jogjakota.go.id/uploads/dokumen/profil_dinkes_2018_data_2017.pdf

Yogyakarta City Government Public Health Office. (2019). *Profil Kesehatan Tahun 2019: Kota Yogyakarta*

(Data Tahun 2018) [2019 Health Profile: Yogyakarta City (2018 data)]. [Data set]. https://kesehatan.jogjakota.go.id/uploads/dokumen/profil_dinkes_2019_data_2018.pdf

Yogyakarta City Government Public Health Office. (2020). Profil Kesehatan Tahun 2020: Kota Yogyakarta (Data Tahun 2019) [2020 Health Profile: Yogyakarta City (2019 data)]. [Data set]. https://kesehatan.jogjakota.go.id/uploads/dokumen/profil_dinkes_2020_data_2019.pdf