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# FACTORS CONTRIBUTING TO POOR ADHERENCE TO ARVS AMONG HIV/AIDS PATIENTS ATTENDING ART CLINIC AT WAKISO HEALTH CENTER IV WAKISO DISTRICT. A CROSS-SECTIONAL STUDY .

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## Abstract

**Background:**

The purpose of this study was to determine the factors contributing to poor adherence to ARVs among HIV/AIDS patients attending the ART clinic at Wakiso Health Centre, Wakiso District.

**Methodology:**

The study design used was the descriptive cross-sectional study design.

**Results:**

The results of the study showed that the individual-related factors were, busy schedules 53.65% and the workplace being very far from the area of picking drugs. The socio-economic related factors that contributed to poor adherence included; unemployment 54%, non-disclosure of respondent's HIV sero status to their families 30%, negative support from family members 61.8% and the health facility-related factors that contributed to poor adherence to ARVs among HIV/AIDS patients included; longer-waiting time on the day of refill 54%, shortage of drugs at the health facility 66%, bad attitudes from health workers towards the respondents and lack of enough information on the drugs from health workers.

**Conclusion:**

Based on the overall findings the researcher concluded that busy schedules, workplace being very far from the area of picking drugs, unemployment, non-disclosure of HIV sero status, negative support from family members, longer- waiting time, shortage of drugs, bad attitudes from health workers and lack of enough information on drugs are the major factors contributing to poor adherence to ARVs among HIV/AIDS patients.

**Recommendation:**

Health education of patients by health workers should be done on dispensing, drug restocking should be regularly done to solve the lack of drugs, reminders should be used for the patients with busy schedules to solve forgetfulness, recruiting adequately trained health care workers in the ART clinic to reduce on the overload and solve the longer-waiting hours, and the government should provide simple jobs to HIV/AIDS patients to solve the unemployment issue and lack of transport fee.

***Keywords:*** Adherence, HIV/AIDS patients, Art clinic, ARVS., Submitted: 2023-07-07 Accepted: 2023-08-11

## 1. BACKGROUND

According to Nanda S et al, 2018, Human immunodeficiency virus (HIV) infected individuals have experienced progressive reductions in HIV-associated morbidity and mortality over the years. Recent studies have shown marked improvements in life expectancy for patients with HIV. Over the last 5years, there has been a rapid change in the treatment strategies for HIV infection with the advent of newer ARV drugs, the treatment has been shifted from mono-therapy and bi-therapy to triple-drug therapy or HAART, which consists of three or more ARV medicines to be taken in combination. To achieve the ARV therapy goal of undetectable levels of HIV in the blood, patients are required to maintain more than 90-95% adherence (Nanda S et al., 2018).

Medical adherence is defined by the World Health Organization as "the degree to which the person's behavior corresponds with the agreed recommendations from a health care provider" IN Mukui, 2016. Suboptimal adherence is a significant challenge worldwide.it is associated with the adversity of individual and health system-related barriers and can lead to patient disengagement from care and treatment. According to Ferrand et al., 2015, Individual factors are related to physical, psychological, behavior, and social-economic challenges, and young children, adolescents and young people, pregnant, and postpartum women, men, and key populations all face specific adherence challenges at different stages of their progression (World Health Organization 2022).

Treatment adherence is one of the strongest predictors of virological failure, development of drug resistance, disease progression, and death (Ochieng W 2015). Poor adherence to combination antiretroviral therapy is common in both developing and developed nations. It was found in around 20% of HIV-infected patients in Africa and around 14% in the United States of America (Psaros C 2015).

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By year-end 2014, approximately 37 million people were living with the human immune deficiency virus globally, with nearly all from low-and middle-income countries. Of those, an estimated 15 million HIV- infected persons were receiving antiretroviral drug therapy, a doubling of numbers on ART from 2010. According to MM Gikunju, 2016, The use of ART has significantly reduced morbidity and mortality over time in persons living with HIV. Globally in 2014, 11.2 million persons died from AIDS–related causes, representing a 42% reduction since the peak in AIDS death in 2004 (UNAIDs 2015).

According to Rashida A.Ferrand 2016, virology data showed that rates of viral suppression (less than 400 copies/ml) range from 27% to 89% in Africa, from 52% to 87% in Asia, and from 37.5% to 49% in central and South America.

The majority of people living with HIV are in low-and middle-income countries. Sub-Saharan Africa is the most affected region, with an estimated 25.6 million people living with HIV in 2015, about 66% of new HIV infections in 2015 occurred in sub-Saharan Africa (PEPFAR 2017). The burden of the epidemic lies largely in sub-Saharan Africa, where the prevalence is estimated to be 2.2% among young women (15-25 years) and 1.1% among young men compared to global estimates of 0.4% and 0.3% respectively (UNICEF 2016).

A study carried out in Haiti, reported 3.41% of HIV patients had poor adherence and 28% had less than excellent adherence, factors related to poor adherence in bivariate analysis were age less than 40years and inability to meet basic needs (Dorcelus L 2021) Results from a study carried out in South Africa showed that the overall adherence stood at 87.2% and non-adherence to treatment stood at 12.8%, patients reported no reason (3.9%), forgetting (3.2%), feeling good (3.2%), fear and running out of treatment (2.5%) as some of the reasons for not taking treatment within the 3days before data collection (Mabunda K 2019).

In Uganda, a study found that poor adherence to long-term ART was due to; travel for work or social activities, stigma, receiving little or no continuous ART adherence education, alcohol consumption, and use of alternative "HIV

Cure" medicines, other reasons included, ART side effects, treatment fatigue, belief that long-term ART or God can "Cure HIV", and food security (Bukenya D 2019).

An analysis carried out in Wakiso Health Centre IV on ARV adherence specifically on women indicated that economic determinants are associated with adherence to ART both positively and negatively. i.e., most of the respondents complained bitterly that they fail to attend Health Centre appointments properly, and take ARVs in proper time but fail to follow doses as required due to low income and the majority of respondents indicated that lack of transport or the failure to travel to the clinic and poor road infrastructures significantly contribute to lack of adherence to ART treatment (Ndejje University, 2022).

### *1.1. General Objective of the study.*

To determine the factors contributing to poor adherence to ARVs among HIV/AIDS patients attending the ART clinic at Wakiso Health Centre IV, Wakiso District.

### *1.2. Specific Objectives of the study.*

- To determine the individual-related factors contributing to poor adherence to ARVs among HIV/AIDS patients attending the ART clinic at Wakiso Health Centre IV, Wakiso District.
- To identify the socio-economic-related factors contributing to poor adherence to ARVs among HIV/AIDS patients attending the ART clinic at Wakiso Health Centre IV, Wakiso District.
- To determine the Health facility-related factors contributing to poor adherence to ARVs among HIV/AIDS patients attending the ART clinic at Wakiso Health Centre IV, Wakiso District.

## 2. METHODOLOGY.

### *2.1. Study design.*

A descriptive cross-sectional study research design was used to carry out this study. It was descriptive because it gave detailed information about the factors contributing to poor adherence to ARVs among HIV/AIDS patients attending the ART clinic at Wakiso Health Centre IV, Wakiso district. Statistically also, it was cross-sectional because data was collected at one point in time in a short period.

### *2.2. Study area.*

The study was carried out at the ART clinic of Wakiso Health Centre IV in Wakiso town council in Wakiso district. The address of Wakiso health center IV is Wakiso Town Council, Namirembe road, Busiro County, Wakiso District, Centre region, Uganda. Wakiso Health Centre IV is a medical facility associated with a hospital for outpatients. Its coordinates are latitude 0023'54" Longitude 32028'40". The distance between Wakiso Health Centre and Kampala is approximately 1197 meters. The study was carried out from December 2022 to March 2023.

### *2.3. Study population.*

The study population consisted of HIV/AIDS patients attending the ART clinic of Wakiso Health Centre IV. This population was chosen because there were increased cases of death and reduced adherence to ARVs among HIV/AIDS patients attending the ART clinic at Wakiso Health Centre IV Wakiso district.

### *2.4. Sample size determination.*

A sample size of HIV/AIDS patients on ARVs was determined using the Burton's formula given below, (Burton's 1965).

S= (QR)/O:

Where:

S=required sample size

Q=number of days the researcher spent while collecting data R=maximum number of respondents per day

O=maximum time the interviewer spent on each respondent

And;

Q=5 days

R=5 respondents O=1/2hour

S=5 ×5/1/2

Therefore, the researcher used 50 respondents.

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### 2.5. Sampling technique.

The study used both probability and non-probability sampling methods to select the respondents. Simple random sampling techniques were used as the probability and purposive sampling was the non-probability. A simple random sampling technique was used because of its low bias levels compared to the techniques, purposive sampling technique was used because of some patients who had a desired character.

### 2.6. Sampling procedure.

50 respondents were used as the sample where 30 were randomly chosen through giving out the questionnaires together with the consent to the patients available randomly and 20 were chosen purposively based on those that were willing to answer and those that had ever answered a questionnaire.

### 2.7. Data collection method.

An organized semi-structured questionnaire, with both open-ended and close-ended questions, was used where respondents were supplied with the questionnaires after consenting and some answered on their own. Those that required interpretation were assisted by the researcher herself and the health workers that helped acted as assistants.

### 2.8. Data collection tool and pre-testing of the questionnaire.

A well-organized semi-structured questionnaire, with both open-ended and close-ended questions, was prepared in English by the researcher and later translated into the local language (Luganda) for respondents who were not able to interpret the questions. This tool was utilized because it was easy to administer, quick in data collection, and less expensive while collecting data for analysis to address a research problem. The researcher pre-tested the data collection tool among 10% of the sample from patients attending the ART clinic at Nabweru Health Center.

### 2.9. Data collection procedure.

A letter of introduction was obtained from the Kampala School of health sciences and it was taken to Wakiso Health Centre IV, Wakiso district, Uganda to obtain permission from the facility administration. Two research assistants were trained in data collection using the questionnaire. The researcher and the assistants met the respondents, introduced themselves, and explained the purpose of the study to gain consent from them. Respondents were selected in such a way that; 45 patients were chosen randomly and 5 patients were chosen purposively at the ART clinic of the health facility considering those who arrived first.

### 2.10. Study variables.

Non-adherence to ARVs was the dependent variable whereas the independent variables were the individual-related factors, socioeconomic-related factors, and the health facility-related factors.

### 2.11. Quality control.

The questionnaires were printed in English language and pre-tested at Nabweru Health Center. The major aim was to ensure that they are valid, reliable, and relevant to the study.2 research assistants were trained using the questionnaire. Standard operating procedures for corona virus were strictly followed and maintained during the period of data collection.

### 2.12. Data analysis and presentation.

Data was analyzed manually by use of tally sheets, processed and analyzed using a simple electronic computer to compute frequencies and percentages (using the Excel computer program); then was presented in terms of percentages, distribution tables, pie charts, and bar graphs for easy interpretation of the study findings.

### 2.13. Ethical considerations.

Before the collection of data for the study, this report was first approved by the research committee of the school. The researcher then sought permission from the administration of the facility to collect data from the health facility. A consent

form was filled out by the respondents after explaining the purpose of the study to them. The respondents were assured of confidentiality as no name appeared on the questionnaire.

No participant was forced to participate in the study and all the study materials used during the interviews were safely kept only accessible by the researcher.

## 3. RESULTS.

### *3.1. Demographic data.*

Out of the 50 respondents who performed in the study, the majority 31 (62%) were female, 19 (38%) were male. 11 (22%) were 18 years and below,18-30 years were 12 (24%),30-45 years were 6 (12%), and those above 45years were 21 (42%).For marital status ;singles were 16 (32%), married 21 (42%), Divorced 5 (10%), widow/widower 1 (2%)(Table 1a).

Those cohabiting were 7 (14%).On the level of education those with no formal education were 11 (22%), primary level of education 17 (34%), secondary level of education 9 (18%), and those of tertiary education level were 3(6%). For Religion majority 21(42%) were protestants,8(16%) were Catholics,6 (12%) were Muslims,15(30%) were falling under different other religions mostly born again. Finally, for occupations; majority 27 (54%) were unemployed,21 (42%) were self-employed and lastly 2 (4%) were civil servants. (Table 1b)

### *3.2. Individual factors contributing to poor adherence to ARVs.*

From the figure 1, most (62%) respondents had taken ARVs above 10 years and the least (8%) had been taking ARVs for less than 1year.

From table 2, majority (82%) of the respondents had ever missed taking their drugs and the least (6%) didn't remember.

From table 3, we see that most (53.65%) respondents had busy schedules as the reasons for missing their drugs while least (9.76%) of the respondents gave their reason as the work place is far from the area of picking the drugs.

From figure 2, the majority (52.2%) of the employed respondents were sometimes hindered by their work while the least (8.7%) were always hindered by their work.

From figure 3, most (54%) of the respondents disagreed that religious beliefs affected their adherence to ARVs whereas the least (2%) of the respondents strongly agreed that religious beliefs affected their adherence to ARVs.

### *3.3. Socio-economic factors contributing to poor adherence to ARVs.*

From figure 4, majority (54%) of the respondents were unemployed and least (4%) of the respondents were both civil servants and some had other different occupations not listed among the options.

Table 4 shows that majority (38%) always disclosed their HIV sero status to their family members whereas the least (30%) did not at all disclose their HIV sero status to their family members.

Figure 5 shows that majority (61.8%) of the respondents were not supported positively by their Family members after disclosure while least (38.20%) of the respondents were supported by their family members upon disclosure.

Figure 6 majority (60%) of the respondents never accessed HIV treatment from traditional healers while the least (14%) of respondents always accessed HIV treatment from traditional healers.

### *3.4. Health facility related factors contributing to poor adherence to ARVs.*

Figure 7 shows that majority (54%) of the respondents had their waiting hours on the appointment day of refilling their drugs more than 2 while the least (12%) of the respondents had their waiting time less than 30 minutes and up to 1 hour.

Table 5 shows that most (66%) of the respondents sometimes found drugs at the health facility while the least (4%) always found drugs at the health facility.

Figure 8 shows that majority (64%) of respondents always got drug information from health workers whereas very few (8%) of respondents did not access it at all.

| Variables | | Frequency(N) | Percentage |
|---|---|---|---|
| Sex | Female | 31 | 62% |
| | Male | 19 | 38% |
| | **Total** | 50 | 100 |
| Age | 18 years and below | 11 | 22% |
| | 18-30 years | 12 | 24% |
| | 30-45 years | 6 | 12% |
| | Above 45years | 21 | 42% |
| | **Total** | 50 | 100% |
| Marital status | Single | 16 | 32% |
| | Married | 21 | 42% |
| | Divorced | 5 | 10% |
| | Widow/widower | 1 | 2% |

**Table 1a) shows the distribution of respondents according to demographic data.(N=50)**

| | | | |
|---|---|---|---|
| | Cohabiting | 7 | 14% |
| | **Total** | 50 | 100 |
| Level of education | No formal education | 11 | 22% |
| | Primary level of education | 17 | 34% |
| | Secondary level of education | 9 | 18% |
| | Tertiary level of education | 3 | 6% |
| | **Total** | 50 | 100% |
| Religion | Protestants | 21 | 42% |
| | Catholics | 8 | 16% |
| | Muslims | 6 | 12% |
| | Others | 15 | 30% |
| | **Total** | 50 | 100% |
| Occupation | Unemployed | 27 | 54% |
| | Self-employed | 21 | 42% |
| | Civil-servant | 2 | 4% |
| | **Total** | 50 | 100% |

**Table 1b) shows the distribution of responds according to demographic data.(N=50).**

| **Variables** | **Frequency (N)** | **Percentage (%)** |
|---|---|---|
| Ever missed | 41 | 82 |
| Don't remember | 3 | 6 |
| Never | 6 | 12 |
| **TOTAL** | **50** | **100** |

**Table 2 shows distribution of respondents according to their level of Adherence to ART.**

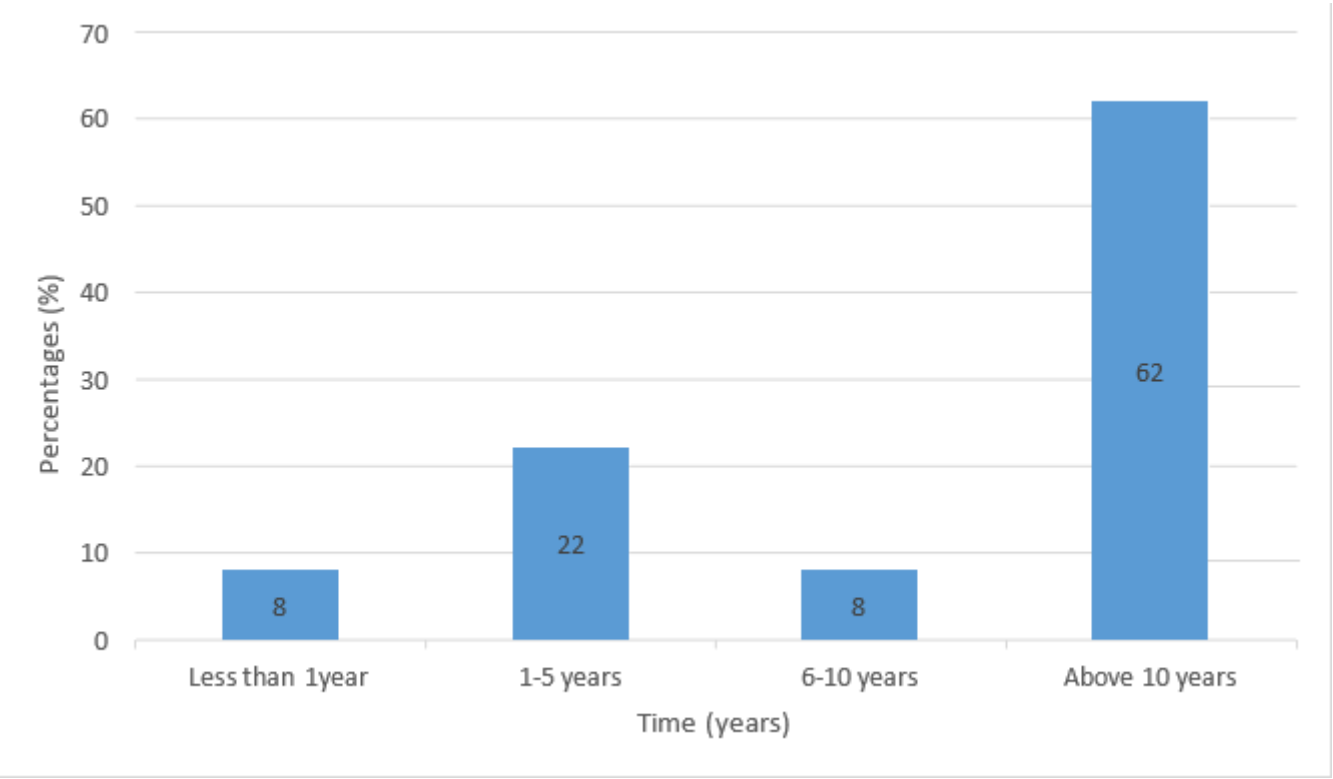


Figure 1: **Shows how long patients have been taking their ARVs. (N=50)**

| Variables | Frequency (N) | Percentage (%) |
|---|---|---|
| Busy schedule | 7 | 53.65 |
| Work place is far from the area of picking the drugs | 4 | 9.76 |
| Lack of transport from Home | 8 | 19.5 |
| Others | 22 | 17 |
| Total | 41 | 100 |

**Table 3 shows distribution of respondents with their different reasons for missing drugs.**

| **Variables** | **Frequency (N)** | **Percentage (%)** |
|---|---|---|
| Always | 19 | 38 |
| Some times | 16 | 32 |
| Not at all | 15 | 30 |
| **TOTAL** | **50** | **100** |

**Table 4 shows the distribution of respondent's disclosure about their HIV sero status to family members.**

| **Variables** | **Frequency (N)** | **Percentage (%)** |
|---|---|---|
| Always | 2 | 4 |
| Sometimes | 33 | 66 |
| Never | 15 | 30 |
| **TOTAL** | **50** | **100** |

**Table 5 shows distribution of respondent's feedback to ftnding ARVs at the health center.**

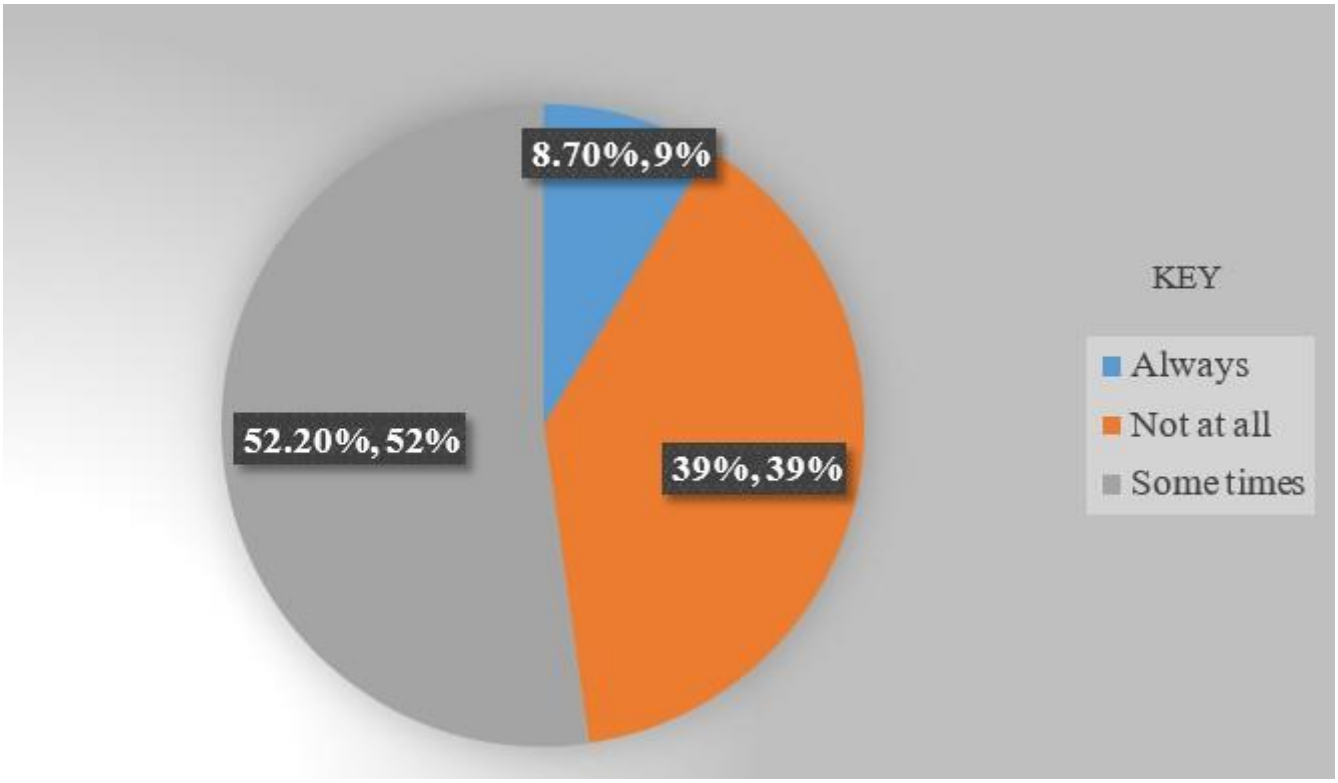


Figure 2: **Shows distribution of respondents work towards poor adherence to ARVs.(N=50)**

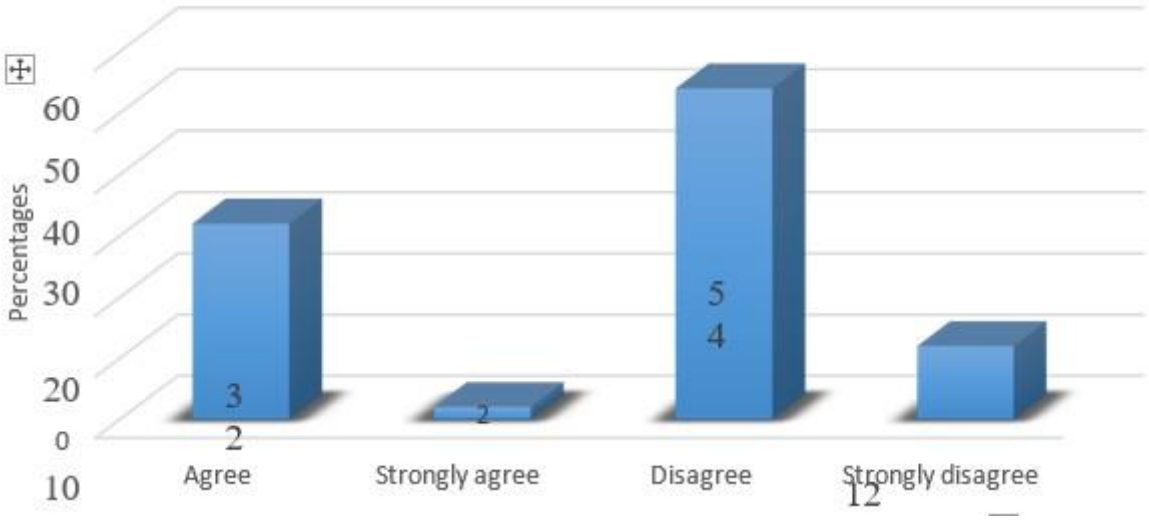


Figure 3: **Shows how religious beliefs affect respondents' adherence to ARVs.(N=50)**

| **Variables** | **Frequency (N)** | **Percentage (%)** |
|---|---|---|
| Good | 18 | 36 |
| Bad | 2 | 4 |
| Fair | 30 | 60 |
| **TOTAL** | **50** | **100** |

**Table 6 shows distribution of respondent's feedback on health worker's attitudes towards them.**

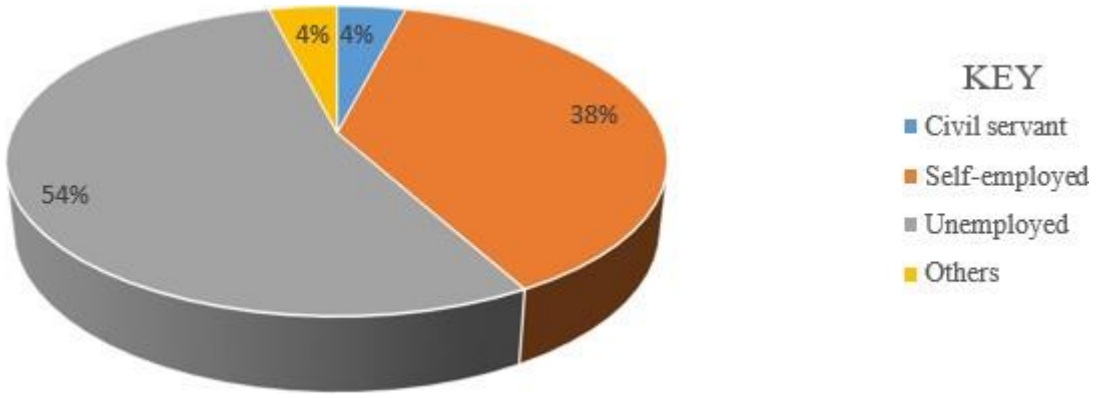


Figure 4: S**hows distribution of the respondents according to their occupation.(N=50)**

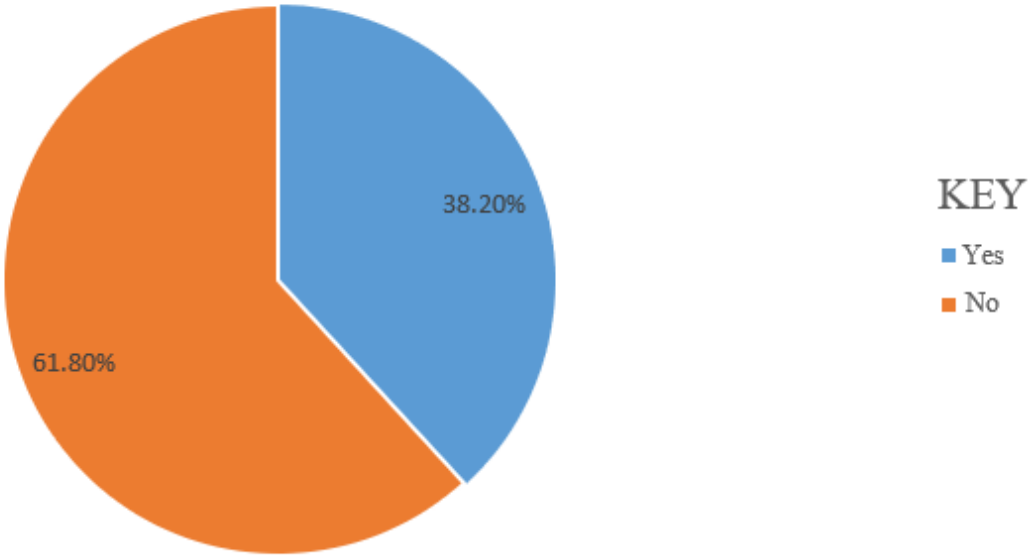


Figure 5: **Shows the distribution of respondents towards support from family members.**

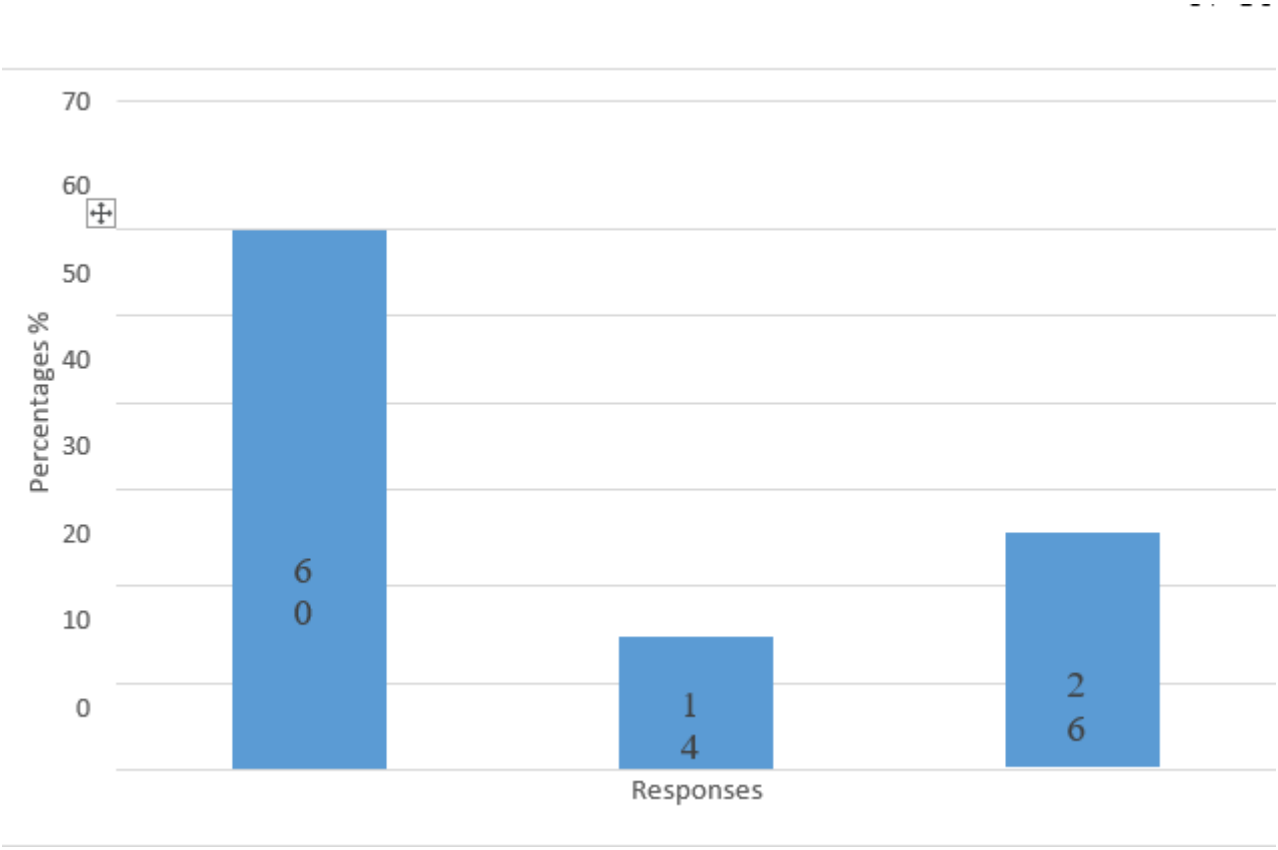


Figure 6: **Shows the distribution of respondent's feedback towards accessing HIV treatment from traditional healers.(N=50)**

Table 6 shows that most (60%) of the respondents were treated fairly by health workers at the health center while a few (4%) of respondents were unfairly treated.

## 4. DISCUSSION.

### *4.1. Individual-related factors contributing to poor adherence to ARVs among HIV/AIDS patients.*

The study results showed that the majority (82%) of the respondents had ever missed taking their drugs, according to this there is still a gap since only (12%) had never missed taking their drugs. This indicates that more research is therefore required to be carried out on adherence to reduce poor adherence and this was because there are many factors and mainly individual that is, busy schedules and others that lead to poor adherence. This is in line with (Grace 2018), whose respondents showed the level of adherence as only 33%.

The study results showed that most (53.65%) of the respondent's busy schedules mainly at work and workplaces being far from the area where drugs are accessed were factors to poor adherence. This explains that most of the respondents could simply forget about taking and picking their drugs because of their busy schedules and the ones that work from far areas were lazy and may be worried about the distance which could lead to poor adherence. This agrees with (Bukenya D 2019) whose results showed that 53% of the respondents move very long distances to pick up their drugs and reported that some respondents reported that their non-adherence to ART was out of laziness. And this was further discussed by (Chirambo Lusungu 2019) who listed forgetfulness among his patients as factors which is mostly a result of busy schedules.

The study results showed that amongst the em-

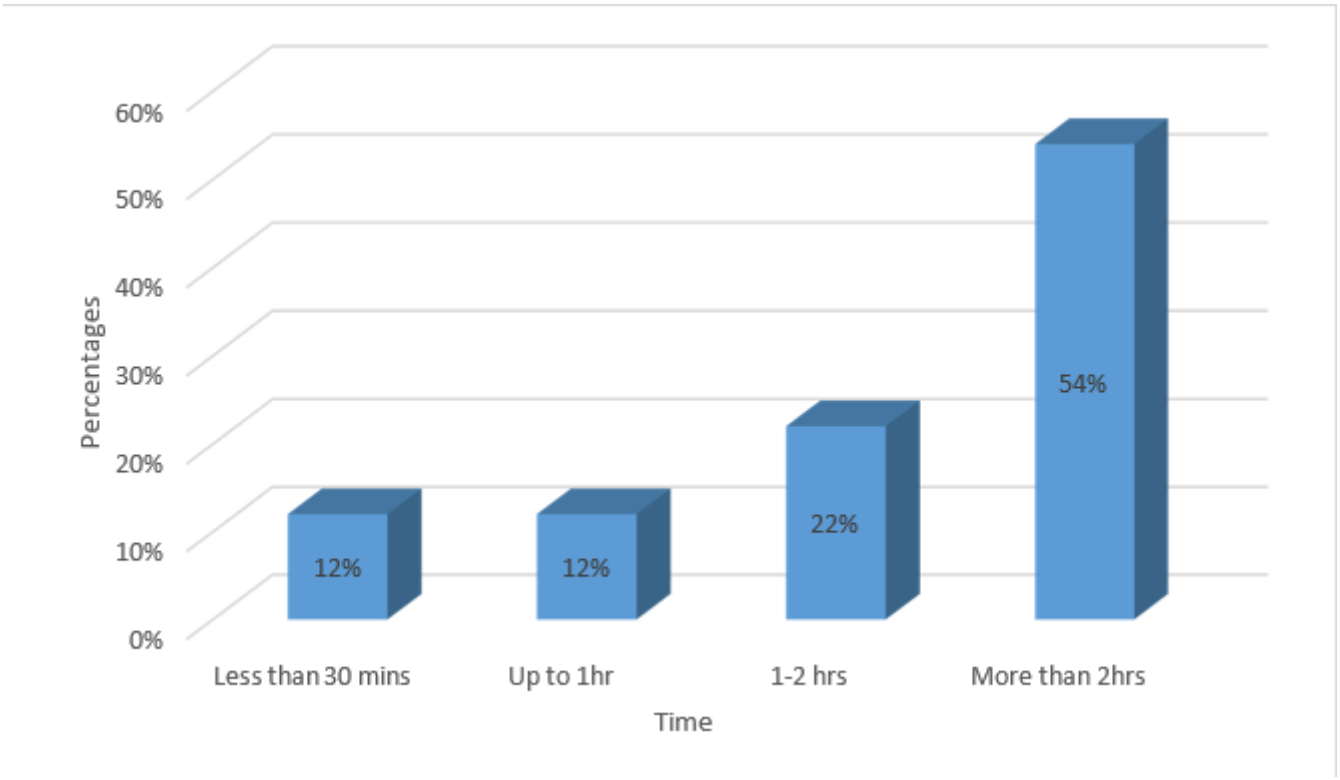


Figure 7: **shows distribution of respondent's waiting time for their appointment day of drug reftll.(N=50)**

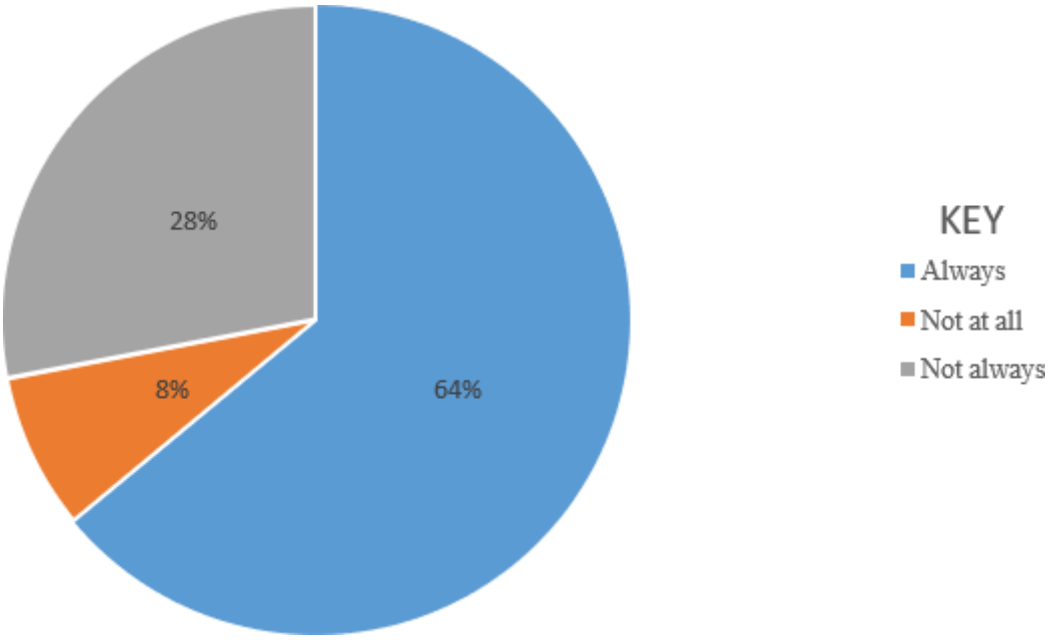


Figure 8: **Shows distribution of respondent's feedback on how often health workers provided them with information on drug use.(N=50)**

ployed respondents, the least (8.2%) of the respondents were always hindered by their work. This is because employed respondents normally can support themselves financially in transport expenses, consultation fees, laboratory fees, and many other things that require many thus improved adherence however this is still alarming because if they don't adhere because of work they might not be around or might not be strong enough to work shortly and is in line with (Sammy Kithinji 2019) whose least respondents (36.9%) said their work hindered them from adherence to ART.

The study results showed that (54%) of the respondents disagreed that religious beliefs affected their adherence to ARV drugs which was a factor that contributed to good adherence and this explains that in most of the churches, mosques, and cathedrals there are small groups formed that encourage patients to believe in God as they continue taking drugs without giving up and this is in line with (Mehari. M 2017) Whose results showed that only 2.5% of his respondents stopped taking ARVs because of religious beliefs.

### *4.2. Socio-economic related factors contributing to poor adherence to ARVs among HIV/AIDS patients.*

The study findings showed that the majority (54%) of the respondents were unemployed which is a factor in non-adherence. This is explained by the inability of the respondents to transport themselves to the areas of picking drugs especially those living in far areas, some cannot contribute to their consultation fees, laboratory fee, and many other requirements that need money and this is in agreement with (Khweswa 2017) who said that lack of employment opportunities is an attributable factor to non-adherence and (Niilonga Elina N 2017) whose results indicated that 60.6% of respondents become nonadherent because of economic factors.

Findings from the study also showed 38% of the respondents always disclosed their HIV sero status to their family members which is a factor that would enable good adherence to drugs. And this is usually because family members normally support their relatives positively and they sometimes remind them when they forget to take their drugs or pick their drugs and which is a psychological therapy too. This is in agreement with (A. B. Almaz Mengistic 2018) whose results showed that the majority (87.2%) of the respondents in the study had disclosed their sero status to their families.

The study showed that the majority (61.8%) of the respondents reported not being supported positively by their family members after disclosure. This is an alarming factor since stigma from our very own family affects us in all aspects psychologically, mentally, socially, and in many other ways thus many patients lack people that may care to remind them to take their drugs to improve their adherence. This does not agree with (Sammy Kithinji 2019) where only (14.8%) reported a lack of family support which frequently contributed to their ART non adherence.

The study findings showed that the majority (60%) of the respondents never sought HIV treatment for traditional healers. This is a result of most of all belonging to the mainstream church this is a good sign of adherence since in the church faith is built with actions thus they are encouraged to continue taking their drugs as they believe, agreed with (Sammy Kithinji 2019) who said that "Religion plays a big role when it comes to health-seeking behavior.

### *4.3. Health facility-related factors contributing to poor adherence to ARVs among HIV/AIDS patients.*

The study results showed that the majority (54%) of the respondents had their waiting hours on the appointment day of picking their drugs more than 2 hrs. This is a very long period according to respondent's schedules of their day and therefore would affect their adherence level this was in agreement with (Mwale 2016) who said participants complained about long waiting times which made them more likely to stop coming to the clinic to collect their drugs.

The study results showed that the majority (64%) of the respondents always got drug information from their health workers this is a factor

in good adherence. Drug information like drug reactions, side effects, results of non-adherence, and results of good adherence, and much other information required through counseling is very important in adherence. This explains why consoled patients and those that have adequate information on the drugs have better adherence and this is because these patients are prepared enough for the side effects of ARVs, and this is in line with (Ndashimye E 2019)who reported that the commonly used NNRTI, EFV is associated with adverse gastrointestinal effects and rashes and when patients are well informed about these there is improved adherence. This is not in line with (Khweswa 2017) whose study showed that inadequate counseling for patients upon receiving their health status may account for non-adherence since the patients are still in shock and denial.

The findings showed that 66% of the respondents did not always find their drugs at the health facility which is a factor contributing to poor adherence. Some of the patients are given smaller doses compared to what has been prescribed that is, given drugs for three weeks yet two months are prescribed many patients are lazy to continuously keep visiting the health facility for the drugs thus leading to poor adherence and this is in line with (Mwale 2016) where his majority of participants reported ART clinic to have been running low on the ARV stocks which led to patients being given ARV supplies sparingly and 17.8% participants reported a stock out of third line drugs which are mostly found at referral hospitals and patients had to travel to access treatment.

The study results showed that most (60%) of the respondents reported fair attitudes from their health workers at the health center which is a factor in improved adherence to ARVs.This indicates that how health workers treat the patients highly influences adherence since unfair attitudes scare off patients to explain how they feel, why they are failing to adhere, troubles they are finding with the drugs, stigma, and many more things which lead to poor adherence. This is in line with (Sammy Kithinji 2019) who reported that 53.9% of the respondents never failed to adhere to their ART due to the attitudes of the healthcare workers.

## 5. CONCLUSION.

Regarding individual related factors, busy schedules where 53.65% of the respondents reported that they are always busy with work and many other things that make them forget to take drugs, workplaces very far from the area of refilling the drugs where a small but alarming percentage of 9.76% respondents did not adhere because of the longer distances, lack of transport fee where 19.5% of the respondents had a low level of adherence because they lacked transport, work hindering them from their ARV drugs with 8.7% not adhering and religious beliefs where 2% had a very low adherence.

The socio-economic status that contributed to poor adherence included unemployment with 54% of the respondents not adhering because they were lacking a supportive money source that could support them financially for an improved adherence, non-disclosure of respondent's HIV sero status to their families with 30% of respondents not disclosing which affects adherence, Negative support from family members where 61% of the respondents were affected leading to poor adherence and seeking treatment from traditional healers with 14% of the respondents seeking treatment from traditional healers which largely affects adherence.

The health facility-related factors that contributed to poor adherence to ARVs among HIV/AIDS patients included longer waiting hours with 54% of the respondents reporting that this largely affects adherence since patients might be having some other things to do during the day, shortage of drugs at the health facility where 66% of the respondents were affected lowering their adherence levels, and lack of enough information on the drugs, adherence and more information given during counseling where 8% of the respondents were affected, Health worker's attitudes where only 4% of the respondents were affected leading to poor adherence.

Based on the results above a final result was made with the individual related factors as busy

schedules 53.65% and the workplace being very far from the area of refill. The socio-economic related factors that contributed to poor adherence also included; unemployment 54%, non-disclosure of respondent's HIV sero status to their families 30%, negative support from family members 61.8% and the health facility-related factors that contributed to poor adherence to ARVs among HIV/AIDS patients included; longer-waiting period on the day of refill 54%, shortage of drugs at the health facility 66%, bad attitudes from health workers towards the respondents and lack of enough information on the drugs from health workers.

Using the overall findings, the researcher concluded that busy schedule, workplace very far from the area of picking drugs, unemployment, non-disclosure of respondent's HIV sero status to family members, negative support from family members,

Longer- waiting hours, shortage of drugs, inadequate information on the drugs, and health workers' attitudes towards patients are the major factors contributing to poor adherence to ARVs among HIV/AIDS patients.

## 6. RECOMMENDATION.

Health education and counseling of patients by health workers should be regularly done upon dispensing and adequate information about the drugs should be given. This would instill hope and confidence in the patients to take drugs.

Drug restocking should be regularly done by the Ministry of Health in collaboration with Wakiso Health Center IV. This would solve the problem of inadequate drugs at the health facility.

Reminders should be used i.e., Telephone calls should be taken for the patients and their caretakers to help out the patients with busy schedules.

The government of Uganda should organize ways of providing and funding the unemployed HIV/AIDS patients to get Jobs and solve the unemployment and lack of transport factors leading to poor adherence.

The health facility should recruit adequately trained healthcare workers in ART. This would help to cope with increasing workloads in the ART clinics thus reducing the longer-waiting hours and also the unfair attitudes given to patients by some inadequately trained health workers.

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## 9. LIST OF ABREVIATIONS AND ACRONYMS.

**ADR :** Adverse Drug Reactions
**AHF :** AIDs Health care Foundation
**AIDS :** Acquired Immune Deficiency Syndrome
**ART :** Anti-Retroviral Therapy
**ARVs :** Anti-Retroviral drugs
**CART**: Combination Antiretroviral Therapy
**EFV**: Efavirenz
**HAART :** Highly Active Antiretroviral Therapy
**HIV**: Human Immune Virus
**KSHS**: Kampala School of Health Sciences
**LPV/r**: Lopinavir ritonavir
**MOH**: Ministry of Health
**NNRTI**: Non-Nucleoside Reverse Transcriptase Inhibitors
**PEP**: Post Exposure Prophylaxis
**PEPFAR**: President's Emergency Plan for AIDs Relief
**PLWH**: People Living With HIV
**PrEP**: Pre-Exposure Prophylaxis
**RPV**: Rilpivirine
**UNAIDS**: United Nations on Acquired Immune Deficiency Syndrome
**UNICEF**: United Nations Children's Fund
**WHO**: World Health Organization

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