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Stigmatization, Self-Image And Discrimination As Predictors Of Adherence To Antiretroviral Therapy Among HIV Positive Pregnant Women In Osun State

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Abstract
This study adopted descriptive design to investigate Stigmatization, Self-Image and Discrimination as predictors of Adherence to ART among HIV positive pregnant women in Osun State. The study was conducted among HIV positive pregnant women in Osun State attending three tertiary health facilities. The sample size of 203 respondents were selected using purposive sampling techniques and each were presented with a validated questionnaire designed for data collection and returned for Data Analysis. Data were analysed using, Statistical Package for Social Sciences (SPSS), version 27. Descriptive statistics was employed to analyze data. Also, hypotheses were tested using regression analysis at 0.05 level of significance. Findings revealed that, majority of respondents were 28-37 years old, were married, in their 2nd trimester and had primary and secondary schools education. More Findings revealed that, slightly above a third (37.4%) adhere to Antiretroviral therapy. More so, the study revealed that significant part of the respondents experience high level stigmatization, negative self-Image and high level discrimination. Hypotheses tested shows stigmatization (p-value< 0.05), negative self-Image (p-value< 0.05) and high level discrimination (p-value< 0.05) relatively and jointly influence Adherence to ART. The study concluded that, about a third fully complied with Adherence to ART, which is partly due to high level of discrimination and stigmatization. It is recommended that, there is need for legislation to discourage discrimination of HIV positive pregnant women. This should include, strict sanctions to anyone who discriminate against people with HIV.

Keywords: *ART, Adherence, Discrimination, Self-Image, Stigmatization*

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I. Introduction

The increasing rate of HIV/AIDS among pregnant women across developing countries like Nigeria, continue to be a source of concern among healthcare professionals. This is partly because of its contribution towards global disease burden and as such, continually occupies the frontrunner of major discussions on global health disease (Calder et al., 2020). The burden of HIV/AIDS is further made complex, when patients such as HIV positive pregnant women declined Antiretroviral therapy (ART) adherence, not for technical or availability reasons, rather for preventable or controllable reasons like stigmatization, Negative Self-Image among others. Yet, Dada et al., (2021) emphasized that, non-adherence to ART among women of childbearing age may increase the chances of virologic failure, maternal HIV disease progression, and risk for development of drug resistance among others. Apart from directly affecting mothers´ wellbeing, poor access or poor adherence to ART, may also result in increased chance of Mother-to-Child Transmission. Mother-to-Child Transmission (MTCT) has been identified as the major source of HIV infection among children. As reported by Dada et al. (2021), a good understanding of importance of adhering to ART, such as its ability to prolong life could enhance the level of adherence to ART. Nevertheless, knowledge of HIV and ART may also be influenced by interplay of Negative Self-Image and discrimination as well as stigmatization (Dada et al., 2021).

According to the United Nations AIDS epidemiological updates (2024), 40.8 million people live with HIV/AIDS throughout the world, among whom 15.4 million are women and 2.5 million are children under 15 years of age. The same report indicates that Sub-Saharan Africa accounts for 68 percent of all people HIV-infected. Also global estimates suggest that 19.2 million women were living with HIV in 2019 constituting 52% of all adults living with the infection (Chilaka & Konje, 2021). HIV infection in pregnancy has become the leading cause of mortality among women of reproductive age (United Nations, 2020). While pregnancy itself has little or no contribution to the progression of HIV among women in the early stage of the infection, it presents substantial

risks to babies, families and healthcare workers (Wall et al., 2017). More than one-quarter of all perinatal HIV infections worldwide occur in Nigeria – an estimated 37,000 new mother-to-child HIV transmissions were reported in 2016 alone (Nigeria HIV/AIDS Indicator and Impact Survey, 2019). Also In 2016, HIV prevalence among women in Nigeria was about 51% (1.6 million), compared with 42% among men (1.3 million) (Ozim et al., 2023). Women are indicated to be more vulnerable than men to HIV/ AIDS pandemic in Nigeria (Ozim et al., 2023). In 2018, around half of new HIV infections occurred, mostly among people aged 15-24 (Yarnwaidsaku, 2020). These group belong to the reproductive age. This has overtime affected the productivity in Nigeria. Therefore, preventing HIV/AIDS would go a long way towards enhancing growth and sustainable development of Nigeria as a nation. It is therefore imperative that, mother to child transmission of HIV/AIDS, being one of the key areas HIV/AIDS increases be curtail reduced. This implies that, HIV/AIDs have been a major burden among children, of which major source of contact is transmission between mother and children. It is against this backdrop, this study examine Stigmatization, Self-Image and Disscrimination as predictors of adhere to ART among HIV positive pregnant women in Osun State.

Objectives

1. To assess the adherence to ART among HIV positive pregnant women in Osun State
2. To examine the level of stigmatization of HIV positive pregnant women in Osun State
3. To examine Self-Image of HIV positive pregnant women in Osun State
4. To determine discrimination experience of HIV positive pregnant women in Osun State

Hypotheses

1. There is no significant relative influence of stigmatization, Self-Image and discrimination on adherence to ART among HIV positive pregnant women.
2. There is no significant joint influence of stigmatization, Self-Image and discrimination on adherence to ART among HIV positive pregnant women.

II. Methodology

This study was quantitative-based descriptive research conducted among HIV positive pregnant women in Osun State. Three tertiary Hospitals were used and these include, UNIOSUN teaching hospital, Osogbo, Osun State, State Specialist Hospital Asubiaro and State Hospital Ede. The inclusion criteria were HIV positive pregnant women from 18 years and above, who were around during data collecvion and were willing to be part of the study. A total of 203 HIV positive pregnant women participated in this study. Respondents were selected using purposive sampling techniques. The instrument used for data collection was a questionnaires which include combination of validated self-designed and items adapted from HIV Stigma Scale by Berger, Ferrans and Lashley (2001). The questionnaire was a five level based, comprising of both positive and negative items. Data collected were processed into excel spread sheet, before transferred into Statistical package for social science (SPSS) edition 27. Data were analysed using descriptive statistics, while hypotheses were tested using multiple regression at 0.05 level of significance.

III. Results

Table 1: Frequency distribution of demographic Characteristics

Items	Frequency	Percentage
Trimester		
1st trimester	67	33.0
2nd trimester	111	54.7
3rd trimester	25	12.3
Age		
18-27years	53	26.1
28-37years	123	60.6
38years and above	27	13.3
Marital status		
Single	33	16.3
Married	122	60.1
Cohabiting	48	23.6
Ethnicity		
Yoruba	139	68.5
Igbo	49	24.1
Hausa	15	7.4
Religion		
Christianity	183	90.1
Islam	20	9.9
Level of Education		

Non formal education	8	3.9
Primary	56	27.6
Secondary	117	57.7
Tertiary	22	10.8
Occupation		
Full housewife	12	5.9
Trader	91	44.8
Civil service	71	35.0
Private sector employee	11	5.4
Others	18	8.9
Gestational Week		
1 week-14 weeks	67	33.0
15 weeks-28 weeks	111	54.7
29 weeks and above	25	12.3
Total	203	100.0
Parity		
0-2	136	69.7
3-5	59	30.3
Gravidity		
0-2	141	69.5
3-5	62	30.5

Table 1 presents frequency distribution of respondents by demographic characteristics. About a third (33.0%) of the respondents were in 1st trimester, over half (54.7%) were in 2nd trimester, while, over a tenth (12.3%) were in 3rd trimester. Result also show that, slightly above one-fourth (26.1%) were 18-27 years, majority (60.6%) were 28-37 years, while slightly above a tenth (13.3%) were 38 years and above. On marital status, 16.3% were single, majority (60.1%) were married, while almost a quarter (23.6%) were Cohabiting. On ethnicity, majority (68.5%) were Yoruba, below a quarter (24.1%) were Igbos, below a tenth (7.4%) were Hausa. On Religion, almost all respondents (90.1%) were Christians, while below a tenth (9.9%) practice Islam. On educational level, 3.9% of the respondents had no formal education, slightly above a quarter (27.6%) had primary education, majority (57.7%) had secondary education, while a tenth (10.8%) had tertiary education. Results on Occupation, shows that, 5.9% were full house wife, 44.8% were traders, 35. 0% were Civil servants, 5.4% work with private exablishment, while 8.9% work with other establishment. On Gestational week ,about a third (33.0%) were in 1 week-14 weeks, over a half (54.7%) were in 15 weeks-28 weeks, while 12.3% were in 29 weeks and above. On parity, majority (69.7%) were 0-2, while 30.3% were 3-5. On gravidity, majority (69.5%) were 0-2. While 30.5% were 3-5

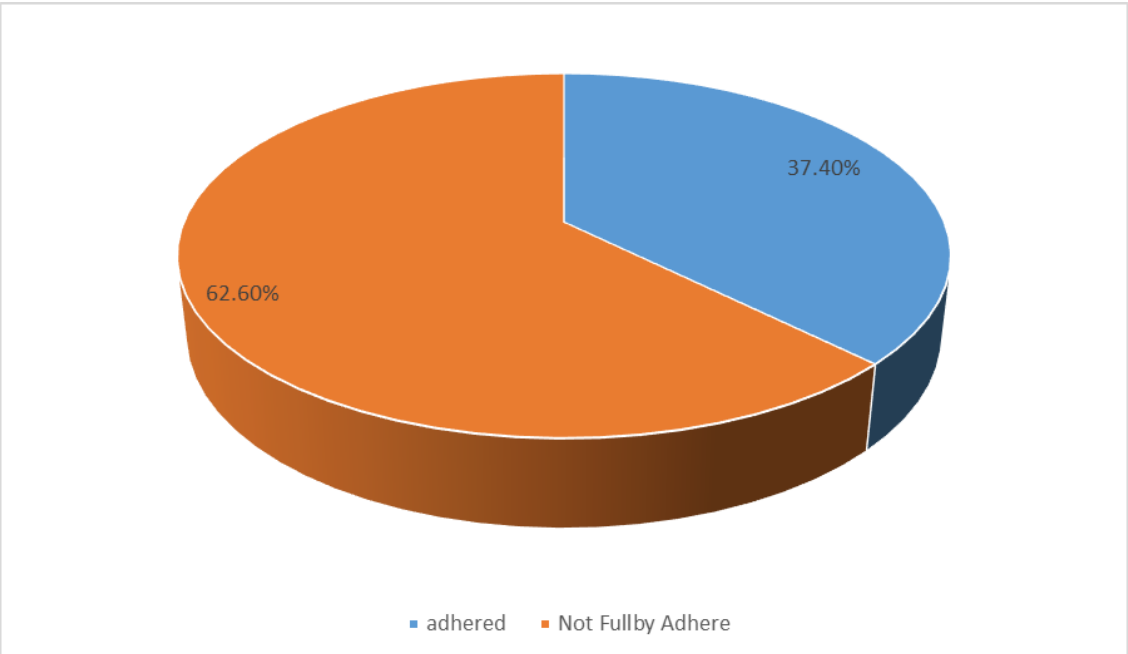

Figure 1: Level of adherence to ART among respondents

Figure 1 above presents result on level of adherence to ART among respondents. Results revealed that, slightly above a third (37.4%) of the respondents adhere to ART on clinic days.

Table 2: Descriptive Statistics showing Result on Stigmatization					
	N	Min	Max	Mean	Std. Deviation
Some people who know I have HIV have grown more distant	203	1	4	2.84	.365
I have been hurt by how people reacted to learning I have HIV	203	1	4	3.04	.421
I regret having told some people that I have HIV	203	1	4	2.72	.450
As a rule, telling others that I have HIV has been a mistake	203	1	4	3.01	.302
Some people avoid touching me once they know I have HIV	203	1	4	3.72	.477
People I care about stopped calling after learning I have HIV	203	1	4	1.79	.910
People have told me that getting HIV is what I deserve for how I lived my life	203	1	4	1.27	.843
Some people close to me are afraid others will reject them if it becomes known that I have HIV	203	1	4	2.56	.438
People don't want me around their children once they know I have HIV	203	1	4	2.76	.426
People have physically backed away from me when they learn I have HIV	203	1	4	2.31	.564
Some people act as though it's my fault I have HIV	203	1	4	1.30	.757
I have stopped socialising with some people because of their reactions to my having HIV	203	1	4	3.65	.278
I have lost friends by telling them I have HIV	203	1	4	2.76	.431
People who know I have HIV tend to ignore my good points	203	1	4	1.24	.618
People seem afraid of me once they learn I have HIV	203	1	4	2.71	.553
When people learn you have HIV, they look for flaws in your character	203	1	4	2.28	.702
Valid N (listwise)	203				

Item is significant at Mean equal or less than 2.5

Table 2 present descriptive statistics showing result on stigmatization. Results show that significant part of the respondents affirmed that, some people who knew they have HIV have grown more distant (2.84). Also significant part agreed that, they have been hurt by how people reacted to learning they have HIV (3.04). Also most regretted telling some people that they have HIV (2.72). A significant part, held that, as a rule, telling others that they have HIV has been a mistake (3.01). Also majority affirmed that, some people avoid touching them once they know they have HIV (3.72). More so, significant part of the respondents agreed that, people close to them are afraid others will reject them if it becomes known that they have HIV(2.56). Also majority held that, people don't want them around their children once they know they have HIV (2.76). More so, most have stopped socialising with some people because of their reactions to their having HIV (3.65). Most also confess that, they lost friends by telling them they have HIV (2.76);People seem afraid of them once they learn, they have HIV (2.71). However only a few of the respondents affirmed that, People they care about stopped calling after learning I have HIV (1.79); People have told me that getting HIV is what they deserve for how they lived my life (1.27); People have physically backed away from me when they learn they have HIV (2.31); Some people act as though it's my fault they have HIV (1.30); People who know they have HIV tend to ignore my good points (1.24) and When people learn you have HIV and that, they look for flaws in your character (2.28).

Table 3: Descriptive Statistics showing Result on Self-Image

	N	Min	Max	Mean	Std. Deviation
I feel guilty because I have HIV	203	1	4	3.60	.375
People's attitudes about HIV make me feel worse about myself	203	1	4	3.02	.472
I feel I am not as good a person as others because I have HIV	203	1	4	2.09	.942
I never feel ashamed of having HIV (R)	203	1	4	1.63	.785
Having HIV makes me feel unclean	203	1	4	2.58	.447
Since learning I have HIV, I feel set apart and isolated from the rest of the world	203	1	4	2.57	.757
Having HIV makes me feel that I'm a bad person	203	1	4	2.70	.483
Having HIV in my body is disgusting to me	203	1	4	3.01	.390
Valid N (listwise)	203				

Table 3 present descriptive statistics showing result on Self-Image. Results show that significant part of the respondents affirmed that, they feel guilty because they have HIV (3.60). Also significant part agreed that,

People's attitudes about HIV make them feel worse about themselves (3.02). A significant part, held that, Having HIV makes them feel unclean (2.58). Also majority affirmed that, since they are aware of their status, they feel set apart and isolated from the rest of the world (2.57). A significant part of the respondents agreed that, having HIV makes them feel like a bad person (2.70). More so, significant part of the respondents agreed that, being HIV positive makes their body disgusting to them (3.01). However only a few of the respondents affirmed that, they feel they are not as good as others because they have HIV (2.09) and were also never feel ashamed of having HIV (1.63).

Table 4: Descriptive Statistics showing Discrimination against Respondents

	N	Min	Max	Mean	Std. Deviation
People with HIV lose their jobs when their employers find out	203	1	4	2.14	.732
People with HIV are treated like outcasts	203	1	4	2.29	.619
Most people believe that a person who has HIV is dirty	203	1	4	2.83	.497
Most people think that a person with HIV is disgusting	203	1	4	2.60	.475
Most people with HIV are rejected when others find out	203	1	4	3.02	.372
Since learning I have HIV, I worry about people discriminating against me	203	1	4	3.09	.442
Most people are uncomfortable around someone with HIV	203	1	4	3.63	.485
Valid N (listwise)	203				

Table 4 present descriptive statistics showing result on discrimination against respondents. Results show that significant part of the respondents affirmed that, most people believe that those with HIV are dirty (2.83). Also significant part agreed that, most people think that a person with HIV is disgusting (2.60). A significant part, held that, most people with HIV are rejected when others find out (3.02). Also majority affirmed that, they worry about people discriminating against them (3.09). A significant part of the respondents agreed that, some people are uncomfortable around someone with HIV (3.63). However only a few of the respondents affirmed that, people with HIV lose their jobs when their employers find out (2.14), also People with HIV are treated like outcasts (2.29).

Table .5: Regression Analysis on influence of Stigmatization, Self-Image and Discrimination on Adherence to ART

Variables	Coefficient	T-values	P-values
Constant	0.218	1.472	0.040
Stigmatisation	0.302	6.422	.001
Self-Image	0.281	4.461	.003
Discrimination	0.369	7.001	.000
R^2	.325		
Model's P-value	.001		
Adj R	.263		
F-stat	5.822		

Source: Field Survey

Table 5 revealed a value of beta coefficient of 0.302 with p-value of 0.001 for Stigmatization. This is an indication that Stigmatization has influence on Adherence to ART at 5% level of significance (0.302). The result provides a part evident of affirming that, there is a significant influence of Stigmatization on Adherence to ART (p-value< 0.05). The effect is such that, Stigmatization constitute a barrier to Adherence to ART.

The table revealed a value of beta coefficient of 0.281 with p-value of 0.003 for Self-Image. This is an indication that Self-Image has influence on Adherence to ART at 5% level of significance (0.281). The result provides a part evident of affirming that, there is a significant influence of Self-Image on Adherence to ART (p-value< 0.05). The effect is such that, Self-Image constitute a barrier to Adherence to ART.

The table revealed a value of beta coefficient of 0.369 with p-value of 0.001 for Discrimination. This is an indication that Discrimination has influence on Adherence to ART at 5% level of significance (0.369). The result provides a part evident of affirming that, there is a significant influence of Discrimination on Adherence to ART (p-value< 0.05). The effect is such that, Discrimination constitute a barrier to Adherence to ART.

Furthermore, the table above revealed an adjusted correlation value of .263 and a model p-value of 0.001. This is an indication that, all independent variables (Stigmatization, Self-Image and Discrimination) make a joint influence of 26.3% to the dependent variable (Adherence to ART). This is an indication that, the null hypothesis which state that, there is no significant joint influence of Stigmatization, Self-Image and Discrimination on

Adherence to ART was rejected, while the alternative which state that, there is a significant joint influence of Stigmatization, Self-Image and Discrimination on Adherence to ART was upheld.

IV. Discussion

The findings revealed that, most of the respondents were in their 2nd trimester, although appreciable percent were also in their 1st trimester and third trimester respectively. This shows that the respondents were selected across the three trimesters, which give credence to the findings. More so, only matures respondents are considered in this study, although majority are between 28-37 years old are married. This implies that, data are generated from well experience persons. Findings also revealed that, the ethnicity of respondents' area well distributed among the major ethnic groups in Nigeria. From the finding it is glaring that, most of the respondents are Christians and most are also educated, although majority didn't progress pass primary and secondary schools. More finding revealed that majority of the respondents are either employed such as Civil servants or self-employed such as traders. More Findings revealed that, most of respondents do not adhere to ART. The implication is that, most of the respondents encounter barriers such as those highlighted in the study. This is directly inverse of the findings of Calder et al., (2020) in a study which reported approximately 61.0% of study participants were adherent to ART. More so, the study revealed that significant part of the respondents experience stigmatization. This is evidence where significant part of the respondents confirmed that, some people who are aware about their status; distance self, react, avoid touching, among others. Therefore most respondents regret allowing other know their status. This retreated what several studies had established that, the level of stigmatization of HIV clients across board is high and spread across families, workplace, community and the society at large. This agrees with Okoronkwo et al., (2013) in a cross-sectional study on HIV infected adults attending ART clinic in Nigeria to explore non-adherence factors in relation to their socioeconomic characteristics, they found that the commonest occurring factors of non-adherence to ART include stigma. Finding revealed that, most of respondents experience negative self-Image. This is evidence where significant part of the respondents confirmed that, they feel guilty because of their HIV status, especially because of people's attitude. Therefore, most of the respondents, feel unclean, feel set apart and isolated, feel as a bad person and feel disgusting. Finding is in line with Oladunni et al., (2021) found that, 67% of HIV-infected feeling less valuable than other children who are not infected with HIV. More so, discrimination level against HIV pregnant women. This is evidence in the result where significant part of the respondents affirmed that, most people with HIV are said to be dirty, disgusting, are rejected, experience discrimination among others. Findings agrees with Valle et al., (2018) when they found that, discrimination of pregnant women is high and its affect they psychological stability of patients.

V. Conclusion

The increasing rate of transmission of HIV from mother to child is a global health, especially as rate of HIV among children have risen continually in recent time. This contributed significantly to increasing child and mother mortality and attested to the fact that, HIV/AIDs have been a major disease burden of children, of which major source of contact is through transmission between mother and children. Nigeria is therefore reportedly having the highest number of children who are contracting HIV in the world, which have been said to have been significantly due to mother to child transmission. However, understanding infection prevalence rates is essential for clinicians and policymakers for the development and implementation of timely and effective interventions. While various individual studies have provided some insights about the likely prevalence of HIV among pregnant women in different parts of Nigeria,

Understanding the factors associated with ART non-adherence among pregnant women with HIV, is crucial for nurses in antenatal care settings. It enables healthcare professionals to tailor interventions and support services to address specific risk factors identified in this population. Additionally, this knowledge empowers nurses to enhance preventive measures, such as promoting safe practices during childbirth and educating pregnant women on effective ways to reduce the risk of HIV transmission. Integrating these insights into nursing practice can contribute to more targeted and effective healthcare strategies, ultimately improving the overall maternal and child health outcomes related to HIV/AIDS. The study concluded that, stigmatization, negative self-image and discrimination influence adherence to ART among pregnant women.

References

[1]. Calder, C., O'Hara, H., Tabatabai, M., Maxwell, C. J., Marryshow, S., Ahonkhai, A. A., Audet, C., Wester, W And Aliyu, M. (2020). Adherence To Combination Antiretroviral Therapy Among Pregnant Women Enrolled In A HIV Prevention Program In Rural North-Central Nigeria. PMCID: PMC7031888 PMID: 32123632

[2]. Chilaka, V. N. & Konje, J. C. (2021). HIV In Pregnancy - An Update. Epub, 256:484-491. Doi: 10.1016/J.Ejogrb.2020.11.034.

[3]. Dada, A. O., Abubakar, O., Bashorun, A., Nguku, P. And Oladimeji, A. (2021). Predictors Of Adherence To Option B+ Approach For The Prevention Of Mother To Child Transmission Of Human Immunodeficiency Virus In Abuja. Pan African Medical Journal;38 (54). 10

[4]. Nigeria HIV/AIDS Indicator And Impact Survey (2019). National Summary Sheet Preliminary Findings. [Accessed August 16 2025]. Https://Www.Naiis.Ng/Resource/Factsheet/NAIIS%20PA%20NATIONAL%20FACTSHEET%20FINAL.Pdf .
[5]. Oladunni, A.A., Sina-Odunsi, A.B., Nuga, B. B., Adebisi, Y . A., Bolarinwa, O. A., Adeola, A.A., Lucero-Prisno, D. E. (2021). Psychosocial Factors Of Stigma And Relationship To Healthcare Services Among Adolescents Living With HIV/AIDS In Kano State, Nigeria. Heliyon.13;7(4):E06687. Doi: 10.1016/J.Heliyon.2021.E06687
[6]. Ozim, C. O., Mahendran, R, And Amalan, M, Et Al. (2023). Prevalence Of Human Immunodeficiency Virus (HIV) Among Pregnant Women In Nigeria: A Systematic Review And Meta-Analysis. BMJ Open;13:E050164. Doi:10.1136/Bmjopen-2021-050164
[7]. UNAIDS And WHO, (2019). Global Report: UNAIDS Report On The Global AIDS Epidemic. New York: Joint United Nations Programme On HIV/AIDS. United Nations Programme On HIV/AIDS (UNAIDS). Preventing Mother To Child Transmission. 2020. Available: Https://Www.Unaids. Org/En/Keywords/Preventing-Mother-Child-Transmission?Page=1 [August 16 2025].
[8]. UNICEF . (2020). Global And Regional Trends.Https://Data.Unicef.Org/Topic/Hivaids/Global-Regional-Trends/ Available From. Accessed: August 16 2025. [Google Scholar]
[9]. Valle-Casuso J. C., Angin M., Volant S., Passaes C., Monceaux V., Mikhailova A., Et Al. (2019). Cellular Metabolism Is A Major Determinant Of HIV-1 Reservoir Seeding In CD4(+) T Cells And Offers An Opportunity To Tackle Infection. Cell Metab. 29 (3), 611–626.E5 Doi: 10.1016/J.Cmet.2018.11.015 [DOI] [Pubmed] [Google Scholar
[10]. Wall KM, Rida W, Haddad LB, Et Al. (2017). Pregnancy And HIV Disease Progression In An Early Infection Cohort From Five African Countries. Epidemiology;28:224–32.
[11]. Yarnwaidsaku, P. (2020). Antiretroviral Treatment (ART) In Thailand. Deputy Director-General, Department Of Disease Control, Ministry Of Public Health.