# THE SPREAD OF HIV/AIDS WITHIN THE HOTEL ACCOMMODATION INDUSTRY: EVIDENCE FROM NIGERIA

Yusuf, Oluwatoyin Idowu Susan[1], Olabinjo, Muhammed Adewale[2], Omotoba, and Nathaniel Ileri[3]

[1]Hotel, Tourism and Creative Studies, Lagos State University of Science and Technology, Ikorodu, Lagos State.
[2]Department of Tourism and Events Management, Afe Babalola University, Ado-Ekiti.
[3]Department of Tourism Studies, National Open University of Nigeria, Abuja, Nigeria.

*Original Article*

## A B S T R A C T

The continuous spread of HIV/AIDs within the hotel industries calls for urgent attention of researchers. The management of hotel industry in Nigeria do not pay adequate attention to the spread of HIV/AIDs within the hotel premises through exchange of contaminated sharp objects among guests/tourist, illicit sexualintercourse with staff of the hotel and re-use of contaminable sharp objects. The study was conducted in Lagos.The population for this study consisted of 592 guests of Eko Hotel and Suites and Lagos Airport Hotel. A sample size of 239 guests was determined using Taro Yamani Formula. Exploratory research design was employed, data were solicited using structured-questionnaire and analysed using descriptive and inferential statistics. This study revealed that there is high possibility of the spread of HIV/AIDs within the Hotel Industries in Nigeria; and management of Hotels do not put adequate measures in place to prevent the spread of the virus. This study recommended that management of Hotels should put adequate measures (pharmaceutical/non- pharmaceutical) in place to coup the continuous spread of the virus. This study concluded that in order to meet the objective of putting an end to the spread of HIV/AIDs in the world, attention should be focused on the hotel industries.

## K E Y W O R D S

HIV/AIDs. Hotel. Accommodation. Way Forward ds:

## Introduction

Scientists believe that HIV originally came from a virus particular to chimpanzees in West Africa during the 1930s, and originally transmitted to humans through the transfer of blood through hunting. Over the decades, the virus spread through Africa, and to other parts of the world (Ajagbe, Peters, Ekanem, & Akpan, 2021). However, it wasn't until the early 1980s, when rare types of pneumonia, cancer, and other illnesses were being reported to doctors that the world became aware of HIV and AIDS. This timeline highlights some of the major events and discoveries in HIV and AIDS since this time (Bakare & Fawehinmi, 2022).

Most people who get HIV get it through anal or vaginal sex, or sharing needles, syringes, or other drug injection equipment (for example, cookers). But there are powerful tools that can help prevent HIV transmission. AIDS represents one of the major public health problems of the 21st century. Men having sex with men, injecting drug use and having multiple sexual partners are well-established risk behaviours for transmitting the HIV virus (Bansal, & Roth, 2022). People with schizophrenia are more likely to engage in these behaviours than the general population and as a result there is an increased prevalence of HIV infection in this group. However, many contemporary mental health policy reports fail to discuss the risk of HIV/AIDS in people with schizophrenia, and there are few specific references to sexual health promotion in these documents. People with schizophrenia should be considered an at-risk population for HIV infection and other sexually transmitted diseases. Psychiatric research, policy and clinical practice need to develop rapidly to address this important aspect of a major public health problem (Clarkson, Li, Richardson, & Vasvari, 2022).

Nigeria's population of 160 million and estimated HIV prevalence of 3.34% makes Nigeria the second highest HIV burden worldwide, with 3.2 million people living with HIV (PLHIV) (Adams, & Busola, 2021). In 2010, US government spent about US$456.5 million on the Nigerian epidemic. Antenatal clinic (ANC) HIV sero-prevalence sentinel survey has been conducted biennially in Nigeria since 1991 to track the epidemic. This study looked at the trends of HIV in Nigeria over the last decade to identify progress and needs (Burgwal, & Vieirra, 2021).

## Statement of the Problem

The continuous spread of HIV/AIDs within the hotel industries calls for urgent attention of researchers. The management of hotel industry in Nigeria do not pay adequate attention to the spread of HIV/AIDs within the hotel premises through exchange of contaminated sharp objects among guests/tourist, illicit sexualintercourse with staff of the hotel and re-use of contaminable sharp objects. Management of hotels rather consider profit generated from the hotel business more important than the health of their guests and employees. It is apparent to note that management failure to pay adequate measures to coup the high spread of HIV/AIDs is responsible to sharp decline in life span of people. Against this background, this study examines the spread of HIV/AIDs within the hotel accommodation industry and the way forward.

## Statement of Hypotheses

$H_{01}$:    HIV/AIDs will likely have significant negative impact on the guests' health and patronage of hotels in Lagos state.

$H_{02}$:    Pharmaceutical/non- pharmaceutical measures cannot coup the negative impact of the HIV/AIDs pandemic

## Literature Review

Other pandemic viruses (LASSA fever, COVID-19, etc.) have emerged in recent years, and the level of anxiety about the dreaded HIV has reduced significantly. Tourists and hotel guests who participate in sex tourism should be informed that the virus is still circulating (Carroll, 2021). Workers in tourist attractions and hotels may also be at risk. According to Afsar (2010), there are currently over 33.4 million people living with HIV, with 2.7 million new infections occurring every year; over 2 million people died of AIDS in 2008 (Davis, 2020). The most badly affected region is Sub-Saharan Africa, with the bulk of those affected being young people. Despite the fact that the tourism industry employs over 235 million people globally, women account for 60 to 70 percent of the workforce, with half of those employed being under the age of 25. According to Afsar (2010), the Serena Hotels in Kenya lost 35 employees to AIDS between 1998 and 2002. This is, in fact, a high percentage; the reasons for this high percentage could be due to the fact that hotel employees are the most vulnerable to a variety of sex-related activities (Swanson, 2020).

According to Kabote et al (2015), HIV/AIDS is responsible for a significant number of deaths in the hospitality industry, particularly among the most productive employees. Many people in the hotel business, it was pointed out, are still unaware of the devastating repercussions of HIV/AIDS. HIV/AIDS education was a critical component in the disease's combat. Sirvastava et al. (2003) define awareness as the condition or capability of perceiving, feeling, or being aware of events, objects, or sensory patterns. Various organizations are working to promote awareness of HIV infection, its consequences, and what they are doing to help HIV-positive persons (Wood, Logsdon, Lewellyn, & Davenport, 2020). The proactive involvement of top management in developing HIV/AIDS solutions was critical for HIV/AIDS management (Sirvastava et al, 2003). By providing accurate information to employees and their families, as well as implementing workplace standards and supportive environments, hoteliers and restaurateurs may contribute to the global fight against HIV/AIDS. A growing number of hotel firms are offering HIV/AIDS awareness, training, and education programmes as the impact of HIV/AIDS on the workplace becomes more obvious (Executive report, 2019). According to Jennifer (2004), the hospitality sector is aware that due to a lack of education and understanding regarding HIV, some of its employees may have a negative attitude toward working with someone who has the disease (Bosch, Montllor, & Tarrazon, 2019).

The tourism industry is a key contributor to the economy, providing jobs, income, tax revenue, and foreign currency (Bollinger, 2001). The link between HIV/AIDS and tourism is multifaceted; the HIV/AIDS epidemic is exacerbated because some vacationers engage in riskier activities (Hannum, 2004). According to Bollinger (2001), sexual activity increases among both visitors and locals; nevertheless, condom use is uneven during these interactions. Young people, in particular, increase sexual involvement during tourist trips, with a significant percentage of these interactions being hazardous.In addition, increasing alcohol use during the holidays increases risky behaviour even more (Apostolipoulos 1996). Tourism is deeply affected by HIV and AIDS due to the mobility of the workforce, the structure of the sector, the presence of sex tourism, and the strong reliance of many countries on tourism profits (Abbot 1992). The view on life of hotel employees has been revealed to be at a significant risk of obtaining HIV (Smith, 2019). Male entertainers who engage in sex with female tourists on a regular basis appear to be more vulnerable. In these relationships, payment for sex is sometimes involved, and condoms arenot always used (Ford 1991). Ford (1991) goes on to explain why the tourism industry is at risk from HIV and AIDS:

• The tourism industry employs a large number of sexually active young single people.

• Employees are frequently on the move and are away from their families for long periods of time.
• Commercial sex is widely available to both employees and tourists.
• Tourists and employees have ample opportunities to engage in sexual activities.
• The use of alcohol and narcotics is common among both tourists and employees.

Sex tourism has grown into a multibillion-dollar industry with an estimated global workforce of millions. Because prostitution is illegal in the majority of nations, detailed information about sex workers, overseas clients, and revenue generated by the industry is unavailable (Jansen, & Jankowski, 2018). Members of the whole travel and tourism business, from taxi drivers to airline staff, hotel and restaurant workers, all gain, both directly and indirectly (Hannum, 2004).

Furthermore, Zengeni and Zengeni (2012) identified three major characteristics that make providing hotel services more difficult and vulnerable to HIV/AIDS:
•Intangibility: Services, unlike tangible goods, cannot be seen, tasted, felt, heard, or tasted before being purchased (Kottler et al, 2004). Visitors take with them the memories they can share with others when they leave. It is necessary to tangibilise service delivery, and one way to accomplish this is by the appearance of staff (Windsor, 2018).
•Inseparability: Inseparability is another hotel service quality that enables tourism service delivery. HIV/AIDS is a contagious disease that affects humans. Both the service provider and the customer must be present for the transaction to take place. Interaction between customers and employees is an important part of service delivery. As a result, the employees' look is critical (Friedman, 2019).
•Variability: The quality of service varies substantially. Because of the wide range of variation, product consistency is highly dependent on the competence and performance of the service provider at the time of the exchange. Service delivery variability or inconsistency could be a major source of customer unhappiness (Beurden, & Gossling, 2021).

## Methodology

Systematic Review and Meta-Analysis was combined with an exploratory research design approach adopted by the researcher. Both secondary and primary data was employed for this study. The population for this study consisted of 592 Guests of Eko Hotel and Suites and Lagos Airport Hotel. Due to the movement restriction and social distancing rule softcopy of structured questionnaire was sent to all the sampled hotels.

The commonly used approach for sample size determination is Taro Yamene (1970) formular for sample size determination.
Using the forular, the sample size therefore is;

$$ ss = \frac{N}{1 + N e^2} $$

Where:

ss = Sample Size

N = Population

e = error term (0.05)

$$ ss = \frac{592}{1 + 592 (0.05)^2} $$

ss = 239

## Reliability of the Research Instruments

The data collected for this study was coded and entered into SPSS 25.0 and was subjected to a reliability test. The reliability test result is shown in Table 1.

### Table 1: Reliability Test Result

### Reliability Statistics

| Cronbach's Alpha | N of Items |
|---|---|
| .721 | 19 |

**Source: *SPSS 25.0 OUTPUT***

The result of the reliability test in Table 3 shows that Cronbach Alpha for all the items in the questionnaire is reliable. This means that the questionnaire is reliable.

### Table 2: Kaiser-Meyer-Olkin (KMO) and Barlett's test of Sphericity

### KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .741 |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 3241.144 |
| | Df | 19 |
| | Sig. | .000 |

**Source: *SPSS 25.0 output***

This study conducted the KMO and Barlett's test of Sphericity. The KMO measures the sampling adequacy (which determines if the responses given with the sample are adequate or not) which should be close than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommended 0.5 (value for KMO) as minimum (barely accepted), values between 0.7-0.8 acceptable, and values above 0.9 are superb. The Table 4 shows that the value of KMO measure for the questionnaire is .741 which is greater than 0.5 and therefore accepted that the sample was adequate.

Bartletts test is another indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is matrix in which all of the diagonal elements are 1 and all off diagonal elements (term explained above) are close to 0. From Table 4, the Bartlett's Test of Sphericity is significant (0.000). That is, significance is less than 0.05. This means that correlation matrix is not an identity matrix.

## Method of Data Analysis

Ordinary Least Square (OLS) regression model was employed to test the hypothesis one and Kendall's W – Test (Dependent means Ranks) was used to rate the different marketing strategies. (OLS) model is considered appropriate because it has the ability to predict the effect of independent variables on the dependent variables.

Formula for Ordinary Least Square model:

Health & Patronage = $\alpha + \beta$ (HIV/AIDs) + e.

Where

Health & Patronage = Health and Patronage of Guests
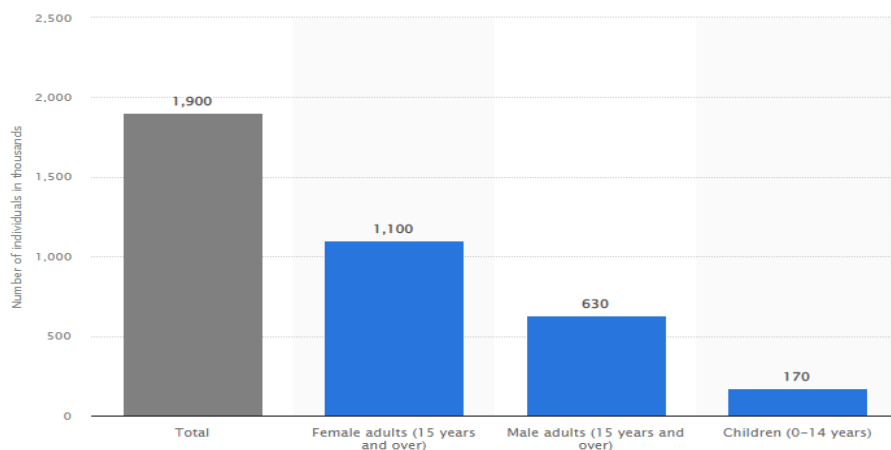
HIV/AIDs. = HIV/AIDs

α = Intercept

β = Slope

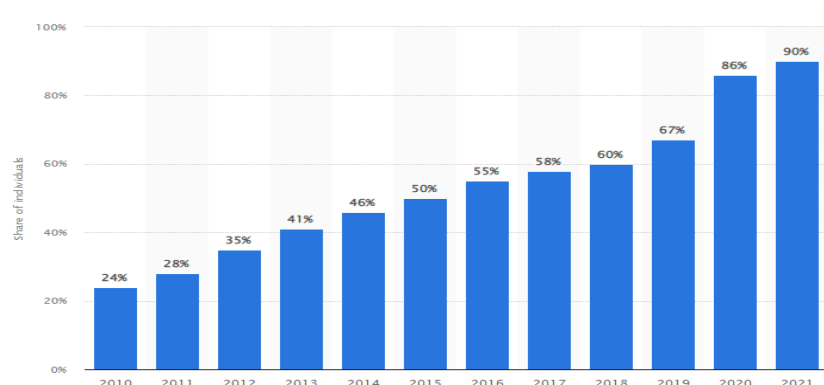e = Error terms

## Data Presentation

The main objective of this study is to ascertain the impact of HIV/AIDs on the guests' health and patronage of hotels in Lagos in respect to HIV/AIDs. Hence, this study considered only the period that the virus is on the increase and Hotel business compelled to cease from operation.

**Table 3 Data Presentation for HIV/AIDs and Performance index for Hotels**



**Sources**: *https://www.statista.com/statistics/1128675/people-living-with-hiv-receiving-treatment-in-nigeria/*

In 2021, 1.9 million people in Nigeria were living with HIV. Women were the most affected group, counting 1.1 thousand individuals. Also, children up to age 14 who were HIV positive equaled 170 thousand.



**Sources**: *https://www.statista.com/statistics/1128675/people-living-with-hiv-receiving-treatment-in-nigeria/*

As of 2021, 1.9 million people in Nigeria were infected with HIV. About 90 percent of them were receiving antiretroviral therapy (ART). Between 2010 and 2021, the share of people on ART grew consistently. Generally, the number of people living with HIV in Nigeria has been growing in the past years.

## Data Analysis
## Hypothesis One

$H_{01}$:    HIV/AIDs will likely have significant negative impact on the guests' health and patronage of hotels in Lagos state.

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|-------------------|----------------------------|
| 1 | .199[a] | .040 | -.280 | 11.721 |

a. Predictors: (Constant), HIV/AIDS

As shown in the result, the relationship (R-Square) between the dependent and independent variables is about 4%, this implies that the independent variable can predict or determine dependent variable (Guests' health and patronage) up to 4% only.

**Co-efficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|---|-----------------------------|---|---------------------------|---|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 17.976 | 6.895 | | 2.607 | .080 |
| | HIV/AIDS | -.001 | .001 | -.199 | -.352 | .000 |

a. Dependent Variable: GUESTS' HEALTH AND PATRONAGE

The value of the intercept 17.976 is the predicted value of guests' health and patronage if the independent variable (HIV/AIDs) is equal to zero. Guests' health and patronage has a coefficient value of $\beta_1$= -0.001, t-test = -0.352 and P-value = 0.000< 0.05, this revealed that a negative and significant relationship exist between guests' health and patronage and HIV/AIDs. This means that a unit increase in HIV/AIDs account for about -.011 unit decrease in the guests' health and patronage.

*The pro(F-statistics) shows that HIV/AIDs has significant effect on the guests' health and patronage.*

## Hypothesis Two
$H_{02}$:    Pharmaceutical/non- pharmaceutical measures cannot coup the negative impact of the HIV/AIDs pandemic

**Descriptive Statistics**

| | N | Mean | Std. Deviation | Minimum | Maximum |
|---|---|---|---|---|---|
| **Compliance with the HIV/AIDs precautions** | 76 | 3.7347 | 0.95253 | 2 | 5 |
| **Services of health workers** | 76 | 3.8776 | 0.85714 | 2 | 5 |
| **Exchange of contaminated sharp objects** | 76 | 4.3469 | 0.77865 | 3 | 5 |
| **Illicit sexual intercourse with staff of the hotel** | 76 | 3.6939 | 1.15838 | 1 | 5 |
| Re-use of contaminable sharp objects | 76 | 3.7551 | 1.18199 | 1 | 5 |
| **Digitalising their operations to reduce/eliminate physical contact** | 76 | 3.9592 | 0.73482 | 2 | 5 |

The mean value implies that opinion of the respondents ranges from 3.693 – 4.347 which is between "Agrees" (4) and "Strongly Agrees" (5).

**Test Statistics**

| N | 76 |
|---|---|
| Kendall's W[a] | .119 |
| Chi-Square | 11.652 |
| Df | 2 |
| Asymp. Sig. | .003 |

a. Kendall's Coefficient of Concordance

The Test Statistics shows that the extent of significance of the test, the result reveals that the Asymp. Sig. is 0.003, which is less than 0.05 level of significant, this implies that the opinion of the respondents is closely related.. The result shows that the p-value is less than the level of significance of 0.05.

## Decision

Since the p value is lower than 0.05, conclusion is hereby drawn that Pharmaceutical/non-pharmaceutical measures can coup the negative impact of the HIV/AIDs pandemic.

## Conclusion/Recommendations

This statistical result implies that respondents unanimously agree that pharmaceutical/non-pharmaceutical measures such as compliance with the HIV/AIDs precautions; engaging the services of health workers; avoiding exchange of contaminated sharp objects; avoid illicit sexual intercourse with staff of the hotel; avoiding re-use of contaminable sharp objects; digitalising their operations to reduce/eliminate physical contact can reduce the spread of HIV/AIDs in the hotel industry among tourists. This study concluded that in order to meet the objective of putting an end to the spread of HIV/AIDs in the world, attention should be focused on the hotel industries.This study recommended that management of Hotels should put adequate measures (pharmaceutical/non- pharmaceutical) in

place to coup the continuous spread of the virus**.**It is also recommended that the hotel owners/managers should develop and implement policy that will safeguard staff and guests of the hotel.

## References

Abbott, G. (1992), *A Long for the Ride: HIV and Sex Tourism*, Routledge Company, London.

Adams, A & Busola, A. (2021). HIV/AIDs and guests' health and patronage in Listed Manufacturing Firms is Nigeria. Social Science Research Network, 44(34), 1- 19.

Afsar, M.S. (2010). HIV/AIDS and Tourism. ILO Programme on HIV/AIDS and the world of work, Geneva.

Ajagbe, A. M, Peters, O. F., Ekanem, E. U., & Akpan, E. S., (2021). How HIV/AIDs affect guests' health and patronage. *International Journal of Research in Commerce & Management, 7(8), 64 – 68.*

Apostolipoulos, Y., Leivadi, S. and Yiannakis, A. (1996), *The Sociology of Tourism Theoretical and empirical investigation*, London New York.

Bakare, A. S., & Fawehinmi, F. O. (2022). An Econometric Study of the Contribution of Health Insurance to the Standard of Living in Nigeria, (1975 – 2018. *Asian Journal of Business & Management Sciences, 1(3),1 – 8.*

Bansal, P., & Roth, K., (2022), HIV/AIDs and guests' health and patronage: A Model of Ecological Responsiveness. *Academy of Management Journal, 74(6), 17 – 36*

Beurden, P. & Gossling, T., (2021). HIV/AIDs and guests' health and patronage – A Literature Review on the Relation Between Health of Workers and Financial Performance, *Journal of Business Ethics, 82.*

Bollinger, L. (2001), *HIV/AIDS and its Impact on Trade and Commerce*, The Futures Group International. Washington.

Bosch, M.T., Montllor, J., & Tarrazon, M.A. (2019). HIV/AIDs and guests' health and patronage from Friedman to Porter and Kramer. Department of Business Economics, Autonomous University of Barcelona, Barcelona, Spain. 3 .(3A) (2019), Article ID:33208,5 pages.

Burgwal, D., & Vieirra, R (2021). HIV/AIDs and guests' health and patronage in Dutch Listed Companies. USP Sao Paulo, 25(64),60 - 78.

Carroll, A.B. (2021). A History of HIV/AIDs and guests' health and patronage, in the Oxford Handbook of HIV/AIDs and guests' health and patronage, Edited by Crane, McWilliams, Matten Moon & Siegel, Oxford: OUP.

Clarkson, P,. Li, Y., Richardson, G., & Vasvari, F., (2022). Does it Really Pays to be Green? Determinants and Consequences of Proactive Environmental Strategies. Journal of Accounting and Public Policy, 8 (30),122 – 144.

Davis, K. (2020). Can Business Afford to Ignore HIV/AIDs and guests' health and patronage, *California Management Review, 2 (Spring).*

Executive report (2019). HIV/AIDs and guests' health and patronage – Monitor, *Journal of Environics International, Canada.*

Ford, N. (1991), Sex on Holiday, The HIV – related Sexual Interaction of Young Tourist Visiting Turban.

Friedman, M. (2019). The HIV/AIDs and guests' health and patronage, New York Times Magazine, September 13th.

Hannum, A.B. (2004), "Tricks of the Trade: Sex Tourism in Latin America", Available at http://www.fas. harvard.edu/%7Edrclas/publications/revista/Tourism/hannum.html

Jansen, K and Jankowski, N. (2018). A Handbook of Qualitative Methodologies for Mass Communication Research, London and New York: Antony Rowe Ltd.

Jennifer, H, (2004). HIV: The Culture of Silence must be overcome. Pearson. New York

Kabote F., Hamadrizpi, F, Sebastian, V., Chimutingiza, F. and Makoni, T. (2015). Employee Perceptions of HIV/AIDS on the Hospitality Industry in Zimbabwe. *Turizam Volume 19, Issue 2, pp47-55*

Kotler, P. Bowen, J. and Makens, J. (2004), Marketing for Hospitality and Tourism (3rdEd).

Sirvastava, G & Sirvastava, A, (2003). Aids Pathology Diagnosis, Treatment and Prevention, 2nd
Ed. CBS. New Delhi.

Smith, A. (2019). An Inquiry into the Nature and Causes of the Wealth of Nations. Strahan & Cadell: London Vol.1: 10.

Swanson, D.L. (2020). Toward an Integrative Theory of Business and Society: A Research Strategy for Corporate Social Performance. *Academy of Management Review. 24 (3).*

Windsor, D. (2018). the Future of HIV/AIDs and guests' health and patronage. International Journal of Organization Analysis. 9 (3).

Wood, D.J., Logsdon J.M., Lewellyn P.G., & Davenport K.S., (2020). HIV/AIDs and guests' health and patronage: A Transformative Framework for Ethics and Sustainable Capitalism. Armonk, NY: M.E. Sharpe.

Zengeni D & Zengeni N (2012). Impact of HIV/AIDS to the tourism sector human resources: Case of selected hotels in Harare. *International Journal of Development and Sustainability, 1, . (3),1088-1102*