

**INFLUENCE OF COMMUNICATION MEDIUM ON THE PREVENTION OF HIV/AIDS
AMONG RESIDENTS IN BIDA LGA, NIGER STATE**

BY

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Abstract

Communication is central to prevention strategies aimed at influencing individual behaviour. With many variations in contexts that determine behaviour, it is evident that communication approaches to HIV/AIDS prevention and care need to be re-evaluated. The study examined influence of communication medium on the prevention of HIV/AIDS among residents in Bida LGA, Niger state. Descriptive survey research design was used for this study. Population comprises all residents in Bida LGA, Niger state. Multistage sampling procedure was used to select 400 respondents. A validated researchers' structured questionnaire was used for data collection. The reliability was carried out using test re-test and correlation co-efficient of 0.75 was obtained through PPMC Statistics. The postulated hypotheses were tested using non-parametric statistics of chi-square at 0.05 alpha level. The findings of this study showed that social media ($\chi^2=200.34 > \text{tab.}=16.92 @ 9\text{df}$), print media ($\chi^2=218.07 > \text{tab.}=16.92 @ 9\text{df}$), and electronic media ($\chi^2=236.47 > \text{tab.}=16.92 @ 9\text{df}$) significantly influenced the prevention of HIV/AIDS. It was concluded that social media, print media and electronic media could be used in prevention of HIV/AIDS among residents in Bida LGA, Niger state. It was recommended that media should be used to communicate on health issues to the residents.

Keyword: Communication, Prevention of HIV/AIDSs, HIV/AIDSs, Communication Medium, Influence

Introduction

The Human Immunodeficiency Virus (HIV) is a retrovirus that infects cells of the immune system, destroying or impairing their function. As the infection progresses, the immune system becomes weaker, and the person becomes more susceptible to infections. The most advanced stage of HIV infection is Acquired Immunodeficiency Syndrome (AIDS). It can take 10-15 years for an HIV-infected person to develop AIDS; antiretroviral drugs can slow down the process even further. HIV is transmitted through unprotected sexual intercourse (anal or vaginal), transfusion of contaminated blood, sharing of contaminated needles, and between a mother and her infant during pregnancy, childbirth and breastfeeding (Dervin & Foreman-Wernet, 2012).

According to report on the Global HIV/AIDS Epidemic (2002), Nigeria has the third largest global number of people living with HIV/AIDS with an estimated number of between (1.7 million and 4.2 million) behind India and South Africa. In 2016, UNAIDS maintained that Nigeria had 3.6 million people living with HIV/AIDS, of which 220, 000 are new HIV infections and 160, 000 AIDS-related deaths. The key population mostly affected by HIV in Nigeria, according to UNAIDS (2016), are sex workers, with an HIV prevalence of 14.4%, Gay men and other men who have sex with men, with an HIV prevalence of 23% and people who inject drugs, with an HIV prevalence of 3.4%. Based on the above, it remains sacrosanct to note that since 2010, new HIV infections have decreased by 21% and AIDS-related deaths have decreased by 6% (Storeyet al, 2014).

Communication is central to prevention strategies aimed at influencing individual and social behaviour. Since there are so many variations in the contexts that determine behaviour, it is evident that communication approaches to HIV/AIDS prevention and care need to be re-evaluated. Of course, communication has no effect on the virus that is responsible for AIDS. It does, however, have powerful effects on knowledge, attitudes, social norms, risk perceptions, and behavioural decisions that affect it and when the virus is transmitted, where and when testing and/or care is sought, how care is delivered, and how well adherence to antiretroviral therapy (ART) is maintained (Storey, et al 2014).

Despite major efforts at behaviour change, myths and misconceptions about HIV transmission remain an important influence on risky sexual behaviours. Subsequently, the behavioural change model is limited in capturing the influence of myths and misconceptions to inform clinical or scientific understanding of the ways in which HIV is transmitted or prevented. Myths and misconceptions may refer to ideas and concepts believed or held by a group of people, which are scientifically proven to be untrue. Studies by Kincaid (2009) also suggest that such misconceptions are a result of the interaction between individual and societal influences. At the individual level, lack of ABC prevention knowledge has been considered an important explanation for misconceptions about HIV (Taylor, 2017).

Social competences, and particularly good communication skills, are becoming increasingly important in contemporary professional environment. Consequently, assessment and development of social competences including communication skills has also become important in higher education of healthcare (Cömert et al., 2016). It is argued that advantages of effective communication cannot be emphasized enough (Choudhary& Gupta, 2015) and it must be noted that excellent communication is also expected by the patients (Hobgood et al., 2012). Despite the emphasis on the need of developing good communication skills, there are studies that report the lack of social and communication competencies in young professionals. A single message can set a chain of message events and conversations in motion. It is this process this series of events not any one alone, which results in behavioural decisions and sustained behaviour over time. However, the most effective communication programmes do not leave this chain of events to chance. Communication interventions are strategically designed to simultaneously address multiple psychosocial and behavioural determinants that may act as barriers to risk reduction or as motivators of service or product uptake. These are carefully and strategically framed and sequenced, based on rigorous, theoretically informed formative research to have an optimum effect on the intended audience (Roter& Larson, 2012).

Social media is engaging as it allows young people to state their views on a particular topic of discussion and this makes them develop a sense of ownership towards the message. This brings out an empowerment element that is very vital in health-related messages. Social media can act as a platform for sharing information that will help individuals and communities to combat HIV-related stigma (Bull, 2018). This is because it allows people to access information about the importance of accepting HIV and the knowledge that being HIV positive does not warrant a defined difference to those who are negative. Seeking to influence behaviour alone is insufficient if the underlying social factors that shape the behaviour remain unchallenged. HIV/AIDS communications must be culturally appropriate, although, when certain dominant cultural and traditional norms and values favour the conditions for the spread of HIV/AIDS, communications practitioners may need to challenge them (Hayes, et al, 2014). However, there is a danger that when outside influence and money back these challenges, local communities often reject what they consider a cultural assault, regardless of how reasonable the outcome or how honourable the intentions of the outsiders. Positive health behaviours are more likely to be attained and sustained when the people within a cultural setting are involved in a contextual transformation process (Iwuji, et al, 2013). Community treatment supporters reduce the burden on overworked medical providers, engage a wider segment of the community, and offer a more sustainable model for supporting people living with HIV (Boily, et al, 2012).

Additionally, mobile technologies are increasingly seen as promising avenues for ongoing cost-effective communication throughout the treatment cascade (Cori, et al, 2014). According to UNAIDS Data Book(2017), since 2010, new HIV infections have decreased by 21% and AIDS-related deaths

have decreased by 6%, and between 2005 and 2016, 15% reduction in new infections has also been recorded. This decline is in line with the assertion of Osakue, et al (2009) that countries, Nigeria inclusive, have been responding to the challenges of HIV/AIDS through various awareness campaigns to sensitise her nationals on meaning, mode of spread as well as prevention of the infection. The above justifies the assumption of Global Media AIDS Initiative (2014) that education is the vaccine against HIV/AIDS.

Statement of the Problem

In confronting HIV/AIDS crisis, many African countries have committed themselves to AIDS control and prevention programmes. In Nigeria, various communication medium have been used to sensitize the public of the dangers of the HIV/AIDS and appropriate preventive behaviour. The major concern currently is why some regions do or communities still have high prevalence rate despite efforts at awareness creation and education for behavioural change in lifestyles that increase the spread of HIV infection? Is it that the HIV prevention education has not reached the target individuals, households and communities? Or it has reached them, but the kind of Medium and channels used have been inappropriate and ineffective in transmitting information in a manner that would lead to behaviour change? Many people have been talking about HIV/AIDS, mode of spread and its management using different mediums which include classroom teaching, seminar, workshop, and even organized conferences while some use counselling procedures. It is on this note that the study sought to examine influence of communication on the prevention of HIV/AIDS among residents in Bida LGA, Niger state.

Research Objectives

Generally, the study sought to examine the communication strategies that influence the prevention of HIV/AIDS among adults in Bida LGA, Niger state. Specifically, the objectives were to;

1. examine if social media will influence the prevention of HIV/AIDS among adults in Bida LGA, Niger state.
2. investigate if print media will influence the prevention of HIV/AIDS among adults in Bida LGA, Niger state.
3. determine if electronic media will influence the prevention of HIV/AIDS among adults in Bida LGA, Niger state.

Research Questions

The study sought to provide answers to the following research questions;

1. Will social media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state?
2. Will print media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state?
3. Will electronic media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state?

Methodology

Descriptive research design of the survey type was used for this study. The researcher used this research design because the study involves clear definition of the problem, collection of relevant and adequate data and reporting of findings and it involved describing the existing data. Also, this design is appropriate for this study because it requires representatives (samples) of the population. The population of the study comprised all residents in Bida Local Government Area, Niger State, Nigeria. Niger state is one of the 36 states in Nigeria that is zoned to the North-central region. The population of all residents in Bida Local Government Area, Niger state is 260,700 while the target population was all adult residents aged 18 and above with population of 125,136 in Bida Local Government Area, Niger state (Projected Population by National Population Commission (NPC), 2016).

The sample size for the study was four hundred (400) adult residents/respondents between the ages of 18 years and above in Bida Local Government Area, Niger state, Nigeria. A multistage sampling procedure was employed thus:

Stage 1: Stratified sampling technique was used to stratify the study area into the existing fourteen (14) wards in Bida Local Government Area, Niger state. This includes Bariki, Ceniyan, Dokodza, Kyari, Landzun, Masaba I, Masaba II, Masaga I, Masaga II, MayakiNdajiya, Nassarafu, UmaruMajigi II, UmaruMajigi I and Wadata.

Stage 2: Simple random sampling technique of fish bowl method was used to select four wards in Bida Local Government Area, Niger state. The randomly selected Local Government Areas were; Masaba I (8,010), Kyari (9,190), MayakiNdajiya (11,090), and Bariki (7,400) with a total population of 35,690.

Stage 3: Proportionate sampling technique was used to select 1.12% respondents based on population distribution of selected wards in Bida Local Government Area, Niger state. This is in line with the Research Advisor (2006) which affirms that for a population that is above 25,000, the required sample size of 381 at 95% confidence level and 5% margin of error is adequate to represent the population. However, to cater for the attrition rate, the sample of 400 ($381 \div 100 \times 5 = 19 + 381 = 400$) was used for the study. This technique ensured that 90 respondents were chosen from Masaba I, 103 respondents from Kyari, 124 respondents from MayakiNdajiya, while Bariki produced 83 respondents.

Stage 4: Finally, a total of four hundred (400) respondents were selected accidentally from the four selected wards. Accidental sampling technique of whoever that is met at homes, ministries, offices, mosques, churches, schools, association meetings and relaxation centres during the administration of the instrument by the researcher with the research assistants were used.

A researchers' developed questionnaire was used to collect data. It elicits information on Influence of Communication on Prevention of HIV/AIDS. The instrument was modified on four-point Likert format rating scale of Strongly Agree, Agree, Disagree and Strongly Disagree. The instrument was validated. Thus, in order to ascertain the validity of this instrument, the researcher gave copies of the instrument to three experts in Department of Health Promotion and Environmental Health Education, University of Ilorin. Their comments and suggestions were carefully studied and used to improve the quality of the final instrument used for the study. In order to determine the reliability of this instrument, the researcher adopted a test re-test method, 20 instruments were administered to twenty (20) adult residents in Mokwa Local Government Area, Niger State among the respondents who shared the same characteristics with the respondents of this study. In two weeks interval, the same instrument of 20 copies was administered for the second time. Both results were compared using Pearson's Product Moment Correlation statistical analysis and a correlation coefficient obtained is 0.75. This is high enough to show that the instrument is reliable for the study.

The researchers' sought for the informed consent of all those that participated in the study. The ethical approval for the study was obtained from the University of Ilorin Ethical Research Review Committee. The researchers with the help of three trained research assistants administered the copies of the instruments and protect the confidentiality of the participants. Four hundred questionnaires were administered but 390 questionnaires were retrieved adequately filled which were used for computation of result. The data for this study was collected, sorted, coded and subjected to appropriate statistical analysis. Inferential statistics of chi-square was used to test the postulated null stated hypotheses at 0.05 alpha level.

Results

Research Question One: Will social media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state?

Table 1: Descriptive Analysis on Social Media on Prevention of HIV/AIDS

Table 1 shows the answer to the Research Question One: The average mean value of positive response

S/N	ITEMS	SA (%)	A (%)	Positive Responses	D (%)	SD (%)	Negative Responses
1.	Important information on the prevention of HIV/AIDS can be send to people on Facebook.	75 (19.2%)	171 (43.8%)	246	110 (28.2%)	34 (8.7%)	144
2.	WhatsApp is a social media that available to billions of people, hence can be used to spread HIV/AIDS awareness among people.	137 (35.1%)	198 (50.8%)	335	41 (10.5%)	14 (3.6%)	55
3.	People can be educated about the causes and prevention of HIV/AIDS on platform like Twitter and Instagram.	88 (22.6%)	199 (51.0%)	287	84 (21.5%)	19 (4.9%)	103
4.	Social media ability to reach millions of people make it a good communication strategy for prevention and management of the spread of HIV/AIDS.	94 (24.1%)	173 (44.4%)	267	91 (23.3%)	32 (8.2%)	123
\bar{X}				284 (72.8%)			106 (27.2%)

by residents in Bida LGA, Niger state to the items is 284 (72.8%), which is greater than the mean value of Negative Response 106 (27.2%). This implies that social media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state.

Research Question Two: Will print media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state?

Table 2: Descriptive Analysis on Print Media on Prevention of HIV/AIDS

S/N	ITEMS	SA (%)	A (%)	Positive Response	D (%)	SD (%)	Negative Response
5.	Newspaper is a good media to spread awareness about HIV/AIDS prevention and control.	60 (15.4%)	201 (51.5%)	153	95 (24.4%)	34 (8.7%)	129
6.	Print media portability make it a good avenue to educate people about the spread of HIV/AIDS.	47 (12.1%)	161 (41.2%)	208	134 (34.4%)	48 (12.3%)	182
7.	Magazine can be used to pass important information about management of HIV/AIDS.	53 (13.6%)	199 (51.0%)	252	108 (27.7%)	30 (7.7%)	138
8.	Print media like newspaper and magazine are valuable communication channels that can be utilised for prevention of HIV/AIDS.	52 (13.3%)	144 (37.0%)	196	151 (38.7%)	43 (11.0%)	194
\bar{X}				202 (51.8%)			188 (48.2%)

Table 2 shows the answer to the Research Question Two: The average mean value of positive response by residents in Bida LGA, Niger state to the items is 202 (51.8%), which is greater than the mean value of Negative Response 188 (48.2%). This implies that print media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state.

Research Question Three: Will electronic media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state?

Table 3: Descriptive Analysis on Electronic Media on Prevention of HIV/AIDS

S/N	ITEMS	SA (%)	A (%)	Positive Response	D (%)	SD (%)	Negative Response
9.	Television can be used to spread awareness about HIV/AIDS prevention and control.	116 (29.7%)	178 (45.7%)	294	81 (20.8%)	15 (3.8%)	96
10.	Radio is a good media to educate people about HIV and AIDS pandemic.	97 (24.9%)	183 (46.9%)	280	92 (23.6%)	18 (4.6%)	110
11.	Electronic media can reach large number of people, so it can be used for prevention of HIV/AIDS.	137 (35.1%)	184 (47.2%)	321	58 (14.9%)	11 (2.8%)	69
12.	Radio can be used to spread information to billions of people on causes of HIV/AIDS so that they can take precautions.	93 (23.8%)	163 (41.8%)	256	110 (28.2%)	24 (6.2%)	134
X				288 (73.8%)			102 (26.2%)

Table 3 shows the answer to the Research Question Three: The average mean value of positive response by residents in Bida LGA, Niger state to the items is 288 (73.8%), which is greater than the mean value of Negative Response 102 (26.2%). This implies that electronic media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state.

Discussion of Findings

In research question one, majority of the respondents were of the opinion that social media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state. This finding is similar to the findings of Bull (2018) which stated that social media can act as a platform for sharing information that will help individuals and communities to combat HIV-related stigma. This is because it allows people to access information about the importance of accepting HIV and the knowledge that being HIV positive does not warrant a defined difference to those who are negative.

In research question two, majority of the respondents were of the opinion that print media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state. This finding is similar to the findings of Bertrand and Anghang (2016) which concluded that there was evidence that print-media news can influence the risk-behaviours of young people in terms of HIV acquisition. Despite Bertrand and Anghang (2016) supporting that print media was the most suitable media for disseminating HIV/AIDS stories, Galloway (2011) found that newspaper had low coverage as compared to other types of media. Galloway (2011) indicated that newspaper was the least accessible form of media with 55% coverage in South Africa as compared to approximately 92% of South Africans who have access to radio, and 76% to television.

In research question three, majority of the respondents were of the opinion that electronic media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state. This finding is similar to the findings of Sonfield and Gold (2011) noticed the important role of electronic media in the awareness and education of HIV/AIDS, its testing and counseling. The role of electronic media was found 38.8% followed by churches 22.8% and print media 15.0% for HIV/AIDS awareness, education and testing. The study found better and important role of television than radio for HIV/AIDS awareness.

Conclusion

Based on the findings of the study, it was concluded that:

1. Social media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state.
2. Print media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state.
3. Electronic media influence the prevention of HIV/AIDS among residents in Bida LGA, Niger state.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Social media such as facebook should be used to communicate on health issues such as HIV/AIDS to the residents.
2. Print media should be used for the prevention of HIV among residents. Such print media should include health education messages.
3. Residents should invigorate their efforts on mass campaign on prevention of HIV/AIDS through electronic media campaign.

References

- Bertrand, J. T. & Anghang R. (2016). *The effectiveness of mass media in changing HIV/AIDS-related behaviour among young people in developing countries*. Systematic Review. <http://www.3ieimpact.org/en/evidence/systematic-reviews/details/218/> assessed on 03/11/2021
- Boily, M. C., Masse, B. & Alsallaq, R. (2012). HIV treatment as prevention: considerations in the design, conduct and analysis of cluster randomized controlled trials of combination HIV prevention. *PLoS Med.*, 9(7):e1001250.
- Choudhary, A. & Gupta, V. (2015). Teaching communications skills to medical students. Introducing the fine art of medical practice. *International Journal of Applied and Basic Medical Research*, 5(4): 41-44.
- Cömert, M., Zill, J. M., Christalle, E., Dirmaier, J., Harter, M. & Scholl, I. (2016). Assessing Communication Skills of Medical Students in Objective Structured Clinical Examinations (OSCE) - A Systematic Review of Rating Scales. *PLoS One*, 11(3): e0152717.
- Cori, A., Ayles, H., Beyers, N., Schaap, A., Floyd, S., Sabapathy, K., Eaton, J. W., Hauck, K., Smith, P., Griffith, S., Moore, A., Donnell, D., Vermund, S. H., Fidler, S., Hayes, R., Fraser, C., & HPTN 071 PopART Study Team (2014). HPTN 071 (PopART): a cluster-randomized trial of the population impact of an HIV combination prevention intervention including universal testing and treatment: mathematical model. *PloS one*, 9(1), e84511.
- Dervin, B. & Foreman-Wernet, L. (2012). *Sense-making methodology as an approach to understanding and designing for campaign audiences*. Public Communication Campaigns: Thousand Oaks, CA.
- Galloway, M. (2011). *Telling the story of the Century: How are journalists coping with reporting on HIV/AIDS in South Africa*. M Phil thesis, University of Stellenbosch.
- Hayes, R., Ayles, H., Beyers, N., Sabapathy, K., Floyd, S., Shanaube, K., Bock, P., Griffith, S., Moore, A., Watson-Jones, D., Fraser, C., Vermund, S. H., Fidler, S., & HPTN 071 (PopART) Study Team (2014). HPTN 071 (PopART): rationale and design of a cluster-randomised trial of the population impact of an HIV combination prevention intervention including universal testing and treatment - a study protocol for a cluster randomised trial. *Trials*, 15, 57.
- Hobgood, C. D., Riviello, R. J., Jourile, N. & Hamilton, G. (2012). Assessment of Communication and Interpersonal Skills Competencies. *Academic Emergency Medicine*, 9: 1257-1269.
- Iwuji, C. C., Orne-Gliemann, J., Tanser, F., Boyer, S., Lessells, R. J., Lert, F., Imrie, J., Barnighausen, T., Rekacewicz, C., Bazin, B., Newell, M. L., Dabis, F., & ANRS 12249 TasP Study Group (2013). Evaluation of the impact of immediate versus WHO recommendations-guided antiretroviral therapy initiation on HIV incidence: the ANRS 12249 TasP (Treatment as Prevention) trial in Hlabisa sub-district, KwaZulu-Natal, South Africa: study protocol for a cluster randomised controlled trial. *Trials*, 14, 230.

- Kincaid, D. L. (2009). *Convergence theory*. Encyclopedia of Communication Theory: Thousand Oaks, CA.
- Osakue, S., Kayode, R., Marcel, A. & Adekunle, A. (2009). HIV/AIDS and the broadcast media: An evaluation of the Edo State of Nigeria situation. *Current Research Journal of Social Sciences*, 1(3): 111-116.
- Roter, D. & Larson, S. (2012). The Roter interaction analysis system (RIAS): Utility and flexibility for analysis of medical interactions. *Patient Education and Counseling*, 46(4), 243-251.
- Sonfield, A. & Gold, R. (2011). States' implementation of the section 510 abstinence education program. *Family Planning Perspectives*, 33 (4): 166-171.
- Storey, J. D., Saffitz, G. B. & Rimon, J. G. (2014). Social marketing. In Glanz, K., Rimer, B. K. & Viswanath, K. (Eds). *Health Behavior and Health Education. Theory, Research and Practice*. (4th ed). San Francisco: Jossey-bass.
- Taylor, J. J. (2017). Assisting or compromising intervention? The concept of “culture” in biomedical and social research on HIV/AIDS. *Social Science Medicine*, 64, 965-975.
- UNAIDS. (2016). Data Book, a report on HIV/AIDS pandemic, extracted from www.unaids.com. Retrieved on 02/10/2021.
- UNAIDS. (2017). Number of People Living with HIV-Interactive Map. Available at: <http://aidsinfo.unaids.org/> Retrieved on 02/10/2021.