# MASS MEDIA STRATEGIES IN MANAGING HIV/HBV CO-INFECTION IN NIGERIA

## Evaristus Adesina<sup>1</sup>, Olusola Oyero<sup>2</sup>, Nelson Okorie<sup>3</sup>, Yartey Darlynton<sup>4</sup> & Babatunde Adeyeye<sup>5</sup>

<sup>1,2,3,4,5</sup>Department of Mass Communication, Covenant University, Ota, Nigeria Correspondence Author: email: <u>evaristus.adesina@covenantuniversity.edu.ng</u>

#### Abstract

Hepatitis and HIV/AIDS co-infection has become a silent killer in Nigeria with high morbidity and mortality rate. This can be traced in part to the information paucity available to the public. This study through the agenda setting theory explains the role of the media in leading the public on the endemic nature, mode of transmission of HIV/HBV co-infection. The study further explores ways the broadcast as well as print media can be used in effectively managing the epidemiological information of the disease.

Keywords: Agenda setting; Hepatitis B; HIV; Mass media

#### **1. INTRODUCTION**

The frequency and prominence attached to an issue by the media is said to be a determinant factor of public agenda. The competition therefore among issues of importance to gain the interest and attention of public and policymakers is addressed by media agenda setting theory (Kozel, Kane, Hatcher, Hubbell, Dearing, Forster-Cox, Thompson, Perez, and Goodman, 2006). The media performs a central role in influencing the beliefs of the society on issues. This is seen in the submission of Cohen that "the press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about" (Bernard C Cohen, 1963; Bernard Cecil Cohen, 2015). The placement of issues such as diseases with high morbidity and mortality rate on the front burner of the media is very fundamental to public knowledge, attitude and practices.

Viral hepatitis and Human Immunodeficiency Virus have been established as major global health challenges causing high rate of morbidity and mortality globally (Alter, 2006; WHO, 2015, 2016; Puglia, Stasi, Da Frè, and Voller, 2016; WHO, 2017). More challenging is the co-infection existence of the diseases as a result of the epidemiological characteristics they share (Benhamou, Bochet, Thibault, Calvez, Fievet, Vig, Gibbs, Brosgart, Fry, and Namini, 2001; Alter, 2006; Singh and Wong, 2009; Organization, 2015). Consequent upon the shared mode of transmission, people at risk of HIV infections are highly susceptible to contracting either hepatitis B or C viruses.

The World Health Organisation has estimated that Hepatitis C virus affects 2–15% of people living with HIV worldwide, while chronic HBV infection affect an estimated 5–20% of HIV patients (Barth, Huijgen, Taljaard, and Hoepelman, 2010). The co-infection burden has been noted to be greatest in Africa and South East Asia. The high seroprevalence rate in Africa is linked to the 25.5 million people living with HIV/AIDS making it the most endemic region globally.

In Nigeria, studies reveals between a 10%- 70% prevalence rate (Ashir, Rabasa, Gofama, Bukbuk, Abubakar, and Farouk, 2009; O. Adesina, Oladokun, Akinyemi, Adedokun, Awolude, Odaibo, Olaleye, and Adewole, 2010; Balogun, Durojaiye, Sagoe, and Emmanuel, 2010; Ajayi, Moses, Denue, Bassi, Dayar, Samuel, and Gashau, 2013; Akyalalshaku, Ishaleku, and Nabe, 2013; Diwe, Okwara, Enwere, Azike, and Nwaimo, 2014), this by implication according to Owolabi, Ibrahim, Musa, Gwaram, Dutse, Hamza, Yakasai, Habib, and Borodo (2014) is the largest prevalence variation of HIV/HBV co-infection from meta-analysis all over the world. Such a prevalence rate therefore questions the role of the Nigeria mass media in health development of the country. The deficient role of the media in providing the HIV/HBV message to the populace is contained in the observations by Denue, Ajayi, Abja, Bukar, Akawu, Ekong, and Alkali (2012) and Uneke, Ogbu, Inyama, Anyanwu, Njoku, and Idoko (2005) that information is very inadequate on the epidemiology of HBV/HIV co-infections. The gap they noted has made the citizens oblivious of the guidelines on the preventive and control measures against the disease.

This study therefore aims to fill this gap by examining informational management role of the media in setting the agenda for the public thereby informing, educating as well as influencing the adoption of health behavioural practices (Adesina, Okorie, Oyero, Adeyeye, and Oyesomi, 2017) of HBVV/HIV.

## 2. EPIDEMIOLOGY OF HIV AND HEPATITIS B CO INFECTIONS

The similar transmission routes (vertical, parental and sexual) of human immunodeficiency virus (HIV) and hepatitis B virus (HBV) co-infections is common globally (Barth *et al.*, 2010; Pittman, Plitt, Birse, Doucette, Romanowski, Cooper, Houston, Shafran, and Singh, 2014). The chronic infection of either HIV or HBV alone severe. An estimate of 36.7 million people are currently living with HIV/AIDS, while hepatitis B accounts for 325 million chronic infections. A coinfection of the disease then complicates the individual severity. The disease which is difficult to treat has a high tendency of chronic infection (Dabis and Ekpini, 2002) thereby causing high rate of liver mortality and morbidity (Mendes-Corrêa and Núñez, 2010).

## 2.1. Empirical review of HIV/ HBV coinfection in Nigeria

In order to properly situate the HIV/HBV situation in Nigeria, the following studies were examined. In a study conducted to find out the seroprevalence of hepatitis B and C among HIV/AIDS patients receiving care at the Federal Medical Centre Keffi,. Out of the 200 blood samples collected, a 17.5% co-infection prevalence was discovered (Grace, Victor, Gloria, Abimiku, and Raphael).

A study conducted by Opaleye, Akanbi, and Binuyo (2017) among 217 health workers in large hospitals in Ibadan revealed that 103 people (47.5) were living with hepatitis b, while 21(9.7%) had the co-infections

Tremeau-Bravard, Ogbukagu, Ticao, and Abubakar (2012) carried out an HBV and HCV prevalence study in the Federal Capital Territory, Abuja among citizens of Nigeria in a clinic receiving HIV/AIDS treatment. It was revealed that 35 patients (7.9%) were co-infected with HBV

Furthermore in a study conducted in the year 2013 in Jos, Nigeria on 175 blood donors within the age bracket of 20-40 years as well as 490 HIV infected persons, it was revealed tat 25 people representing 14.3% of the blood donors and 127 (25.9%) in the HIV infected category were HBV positive, which by implication means a higher HBV infection among people infected with HIV (Nwolisa, Mbanefo, Ezeogu, and Amadi, 2013).

## 2.2 Theoretical perspectives

The primary source of the agenda setting theory can be traced to Walter Lippmann in 1948 when he mentioned "attention frames" as the media playing a fundamental function in directing people's attention towards specific issues (Lippmann, 1946, 1965; Dearing and Rogers, 1996; Yang and Stone, 2003). Furthermore in 1963, Cohen noted that people view a situation in accordance with the opinion of the writer or publisher (Bernard C Cohen, 1963; Bernard Cecil Cohen, 2015). Building on the foundation submissions of Lippmann and Cohen, McComb and Shaws in 1972 established the agenda setting theory which emphasizes the relationship between the media and the perception of the public (McCombs and Shaw, 1972).

While the media have the power to influencing the thought of the people, issues like health coverage should be seen as a task of developmental contribution. Although the mass media system according to Akpobo (2015) have been successful in covering health issues such as Poliomyelitis Vaccine, family planning program, malaria control, HIV/AIDS, Ebola virus, however the media have not beamed it searchlight on.

#### 3. MASS MEDIA AND HIV/HBV CO-INFECTION AWARENESS STRATEGY

Broadcast media: Broadcasting which simply means the transmission of news, instruction and entertainment contents by radio or television (Omoera, 2010) goes beyond the obstacles of literacy and it reaches a mass of people without prejudice except those imposed by the people's own selective decision (Babalola, 1986). Despite their long age of existence as well as categorization under the traditional mass media, radio and television have remained the most accessible sources of information for people all over the world. In the submission of Babalola (1986) radio has been adjudged the most effective medium for getting across to the heterogeneous population setting as Nigeria (Okorie, 2013). Television which has a dynamic technical leap over radio has synchronized features of light, motion and sound. It therefore has the capacity of reaching the rural, semi-urban as well as urban audiences.

Recognizing that the increased understanding of the endemic nature of HIV/HBV co-infections is very necessary and urgent to mitigating it morbidly and mortality effect, the broadcast media can serve a veritable channel of getting people aware of the disease. Messages could be developed around soap opera, jingles, documentaries, feature stories. Since the broadcast media have a role in setting the agenda, HIV/HBV knowledge and awareness campaigns must be targeted at primetime schedules when a large percentage of the people are connected to the listening and viewing devices. The HIV/HBV messages could be scrolled during prime time news broadcast.

Print media: Very important component of the mass media is print journalism. This deals with newspaper and magazine production with an objective of disseminating timely information to the people. Based on the detail nature of reportage of the print media, several studies have proven its effectiveness in disseminating health information, influencing risk and behavioral perception (Gasher, Hayes, Hackett, Gutstein, Ross, and Dunn, 2007; Gollust and Lantz, 2009; Lemal and Van den Bulck, 2010; Rachul, Ries, and Caulfield, 2011; Okorie, 2013; Adesina *et al.*, 2017). To this end, the print media can play its developmental role by setting the HIV/HBV agenda through the following ways frequency: there should be an increased number of stories built around the HIV/HBV co-infections ; prominence: the placement of the stories should be in strategic positions such as front page, inside page, center spread as well as pack page; story types: journalist should endeavor to wrap the story in the following content categories such as straight news, news analysis, interpretive stories, feature articles, cartoons, editorials, interviews and photo page; frame analysis: the schema of the story can be built around the gain and loss frame styles.

## 4. CONCLUSION

The seroprevalence nature of HIV/HBV co-infections will soon reach an upsurge state if not adequately managed, especially through the provision of adequate and timely information by the mass media. The fourth estate of the realm needs to see the coverage of the endemic disease as a development responsibility by setting consistent agenda. This will consequently create a public as well as generate a policy agenda from the government. This study suggests that both broadcast and print media should be effectively utilized to reach the heterogeneous audiences scattered around the 6 geo-political zones of Nigeria.

#### ACKNOWLEDGMENT

The Covenant University Centre for Research, Innovation and Development (CUCRID) provided fund that was used for this study.

#### **REFERENCE LIST**

- Adesina, Okorie, N., Oyero, O., Adeyeye, B., and Oyesomi, K. (2017). Media reportage and audience perception of hepatitis disease in Nigeria. *Global Journal of Health Science*, **9(10**): 68. doi:10.5539/gjhs.v9n10p68
- Adesina, E., Odiboh, O., Oyero, O., Adeyeye, B., Yartey, D., and Ekanem, T. (2018). *Publishing African communication researches in open access outlets: An interrogation of Scopus between 1996-2016* Paper presented at the 31st IBIMA Conference, Milan, Italy.

- Adesina Evaristus, Oyero Olusola, Okorie Nelson, Omojola Oladokun, Amodu Lanre, and Babatunde, A. (2018). *Health management strategies for hepatitis care practices: An interplay of communication structures and social marketing theory.* Paper presented at the 32nd IBIMA Conference, ville, Spain.
- Adesina, O., Oladokun, A., Akinyemi, O., Adedokun, B., Awolude, O., Odaibo, G., . . . Adewole, I. (2010). Human immuno-deficiency virus and hepatitis B virus coinfection in pregnancy at the University College Hospital, Ibadan. *African journal of medicine and medical sciences*, **39(4)**: 305-310.
- Ajayi, B., Moses, A., Denue, B., Bassi, P., Dayar, A., Samuel, J., and Gashau, W. (2013). A 5–Year review of Hepatitis B & C viral infection in person living with HIV in north-east Nigeria. *Journal of medical research and practice*, **2(9)**.
- Akpobo, O. (2015). Mass media health communication: imperative for sustainable health development in Nigeria. *Mgbakoigba: Journal of African Studies*, **4**: 1-6.
- Akyalalshaku, A., Ishaleku, D., and Nabe, B. (2013). SEROPREVALENCE OF HEPATITIS B AND C CO-INFECTION AMONG COHORT SEROPOSITIVE HIV PATIENTS ACCESSING HEALTHCARE IN NASARAWA STATE NORTH CENTRAL, NIGERIA. *British Journal of Psychological Research*, **1(1**): 15-24.
- Alter, M. J. (2006). Epidemiology of viral hepatitis and HIV co-infection. Journal of hepatology, 44: S6-S9.
- Ashir, G., Rabasa, A., Gofama, M., Bukbuk, D., Abubakar, H., and Farouk, G. (2009). Study of hepatic functions and prevalence of hepatitis B surface antigenaemia in Nigerian children with human immunodeficiency virus infection. *Nigerian journal of medicine: journal of the National Association of Resident Doctors of Nigeria*, **18(3)**: 260-262.
- Babalola, M. (1986). Family Planning Media Services. Lagos: Century Publishers.
- Balogun, T., Durojaiye, I., Sagoe, A., and Emmanuel, S. (2010). Seroepidemiology of hepatitis-B surface antigenaemia in HIV positive patients. *West African journal of medicine*, **29(3)**.
- Barth, R. E., Huijgen, Q., Taljaard, J., and Hoepelman, A. I. (2010). Hepatitis B/C and HIV in sub-Saharan Africa: an association between highly prevalent infectious diseases. A systematic review and meta-analysis. *International Journal of Infectious Diseases*, **14(12)**: e1024-e1031.
- Benhamou, Y., Bochet, M., Thibault, V., Calvez, V., Fievet, M., Vig, P., . . . Namini, H. (2001). Safety and efficacy of adefovir dipivoxil in patients co-infected with HIV-1 and lamivudine-resistant hepatitis B virus: an open-label pilot study. *The Lancet*, **358(9283)**: 718-723.
- Cohen, B. C. (1963). T he press and foreign policy. *Princeton, NJ: Princeton UniversityPress. Cohen, J.* (1988) Statistical Power Analysisfor the Behavioral Sciences.
- Cohen, B. C. (2015). Press and foreign policy: princeton university press.
- Dabis, F., and Ekpini, E. R. (2002). HIV-1/AIDS and maternal and child health in Africa. *The Lancet,* **359(9323)**: 2097-2104.
- Dearing, J. W., and Rogers, E. (1996). Agenda-setting (Vol. 6): Sage publications.
- Denue, B. A., Ajayi, B., Abja, A. U., Bukar, A. A., Akawu, C., Ekong, E., and Alkali, M. B. (2012). A survey of hepatitis B and C virus prevalence in human immunodeficiency virus positive patients in a tertiary health institution in North Eastern Nigeria. *International Journal of Medicine and Medical Sciences*, 4(1): 13-18.
- Diwe, C. K., Okwara, E. C., Enwere, O. O., Azike, J. E., and Nwaimo, N. C. (2014). Sero-prevalence of hepatitis B virus and hepatitis C virus among HIV patients in a suburban University Teaching Hospital in South-East Nigeria. *Pan African Medical Journal*, **16(1**).
- Gasher, M., Hayes, M., Hackett, R., Gutstein, D., Ross, I., and Dunn, J. (2007). Spreading the news: social determinants of health reportage in Canadian daily newspapers. *Canadian journal of communication*, **32(3/4)**: 557.
- Gollust, S. E., and Lantz, P. M. (2009). Communicating population health: print news media coverage of type 2 diabetes. *Social science & medicine*, **69(7)**: 1091-1098.
- Grace, P. R., Victor, O. B., Gloria, A. A., Abimiku, A. S., and Raphael, G. P. Seroprevalence of Hepatitis B and C Viruses among Human Immunodeficiency Virus Infected Patients Accessing Healthcare in

Federal Medical Centre, Keffi, Nigeria.

- Kozel, C., Kane, W., Hatcher, M., Hubbell, A., Dearing, J., Forster-Cox, S., . . . Goodman, M. (2006). Introducing health promotion agenda-setting for health education practitioners. *California Journal of Health Promotion*, **4(1)**: 32-40.
- Lemal, M., and Van den Bulck, J. (2010). Television news coverage about cervical cancer: impact on female viewers' vulnerability perceptions and fear. *The European Journal of Public Health*, **21(3)**: 381-386.
- Lippmann, W. (1946). *Public opinion* (Vol. 1): Transaction Publishers.
- Lippmann, W. (1965). Public opinion. . New York: Free Press.
- McCombs, M. E., and Shaw, D. L. (1972). The agenda-setting function of mass media. *Public opinion quarterly*, **36(2**): 176-187.
- Mendes-Corrêa, M., and Núñez, M. (2010). Management of HIV and hepatitis virus coinfection. *Expert* opinion on pharmacotherapy, **11(15**): 2497-2516.
- Nwolisa, E., Mbanefo, F., Ezeogu, J., and Amadi, P. (2013). Prevalence of hepatitis B co-infection amongst HIV infected children attending a care and treatment centre in Owerri, South-eastern Nigeria. *Pan African Medical Journal*, **14(1)**.
- Odiboh, O., Adeyeye, B., and Ekanem, T. (2018). Awareness of e-transaction among consumers of indigenous herbal remedies in Ota, Nigeria: A case for e-herbals. Paper presented at the 2018 4th International Conference on Information Management (ICIM).
- Odiboh, O., Olonode, A., Adesina, E., and Yartey, D. (2018). *Influence of e-communication and digital culture on Nigeria's indigenous socio-cultural systems: A focus on Abeokuta and Ota, Nigeria.* Paper presented at the 2018 4th International Conference on Information Management (ICIM).
- Okorie, N. (2013). Mass media strategies for creating awareness of breast cancer. *Public Knowledge Journal*.
- Omoera, O. S. (2010). Broadcast media in family planning matters in rural Nigeria: the Ebelle scenario. *Journal of communication*, **1(2)**: 77-85.
- Omojola, O. (2016). Using symbols and shapes for analysis in small focus group research. *The Qualitative Report*, **21(5**): 834-847.
- Omojola, O., Odiboh, O., and Amodu, L. (2018). Opinions as Colors: A Visual Analysis Technique for Modest Focus Group Transcripts. *The Qualitative Report*, **23(8)**: 2019-2035.
- Omojola, O., Amodu, L., Okorie, N., Imhonopi, D., Yartey, D., and Adesina, E. (2018). Assessing the One-Lecture-One-Test Learning Model in Undergraduate Journalism Program Using Cohort Design. *The Journal of Social Sciences Research*, 4(12): 591-597.
- Opaleye, O., Akanbi, O., and Binuyo, M. (2017). PREVALENCE OF HBV, HIV, AND HIV-HBV CO-INFECTIONS AMONG HEALTHCARE WORKERS IN IBADAN, NIGERIA. *BMJ Global Health,* **2(Suppl 2**): A45-A45.
- Organization, W. H. (2015). Guidelines for the Prevention Care and Treatment of Persons with Chronic Hepatitis B Infection: Mar-15: World Health Organization.
- Owolabi, L., Ibrahim, A., Musa, B., Gwaram, B., Dutse, A., Hamza, M., . . . Borodo, M. (2014). Prevalence and Burden of Human Immunodeficiency Virus and Hepatitis B Virus Co-infection in Nigeria: A Systematic Review and Meta-Analysis. *J AIDS Clin Res*, **5**(308): 2.
- Oyero, O., and Salawu, A. (2014). Where Lies the Answer? HIV/AIDS Prevention Campaign and the Rising Prevalence in South Africa. *Mediterranean Journal of Social Sciences*, **5(23)**: 2026-2034.
- Pittman, C., Plitt, S., Birse, T., Doucette, K., Romanowski, B., Cooper, R., . . . Singh, A. E. (2014). Prevalence and correlates of HIV and hepatitis B virus coinfection in Northern Alberta. *Canadian Journal of Infectious Diseases and Medical Microbiology*, **25(1)**: e8-e13.
- Puglia, M., Stasi, C., Da Frè, M., and Voller, F. (2016). Prevalence and characteristics of HIV/HBV and HIV/HCV coinfections in Tuscany. *Brazilian Journal of Infectious Diseases*, **20(4)**: 330-334.
- Rachul, C. M., Ries, N. M., and Caulfield, T. (2011). Canadian newspaper coverage of the A/H1N1 vaccine

program. Canadian Journal of Public Health/Revue Canadienne de Sante'e Publique: 200-203.

- Singh, A. E., and Wong, T. (2009). Background document: HIV and hepatitis B co-infection. *Department of HIV/AIDS, World Health Organization*.
- Tremeau-Bravard, A., Ogbukagu, I., Ticao, C., and Abubakar, J. (2012). Seroprevalence of hepatitis B and C infection among the HIV-positive population in Abuja, Nigeria. *African health sciences*, **12(3**): 312-317.
- Uneke, C., Ogbu, O., Inyama, P., Anyanwu, G., Njoku, M., and Idoko, J. (2005). Prevalence of hepatitis-B surface antigen among blood donors and human immunodeficiency virus-infected patients in Jos, Nigeria. *Memórias do Instituto Oswaldo Cruz*, **100(1)**: 13-16.
- WHO. (2015). World Health Organization Hepatitis B Fact Sheet.
- WHO. (2016). Global health sector strategy on viral hepatitis 2016-2021. Towards ending viral hepatitis.
- WHO. (2017). GLOBAL HEPATITIS REPORT, 2017.
- Yang, J., and Stone, G. (2003). The powerful role of interpersonal communication in agenda setting. *Mass Communication and Society*, **6(1)**: 57-74.