

Press Coverage of HIV/AIDS in Northern Nigeria: A Study of Daily Trust

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Abstract

Africa south of Sahara is still bearing more than half of the world's HIV/AIDS burden. Because medical science has been unable to offer anything more than ways or methods of turning it from a fatal into a chronic condition, much emphasis and attention shifted to its prevention. The Mass Media has played a central role in that direction. Evidence of media reportage on HIV/AIDS in countries with high prevalence rates like Nigeria, becomes worthwhile to ensure there is adequate dosage of media 'vaccination' against the disease.. In scoring the press in health priorities (particularly HIV/AIDS) against the backdrop of prescriptions of Development Media Theory in developing countries like Nigeria, this study attempts to investigate the major consistent newspaper in northern Nigeria, the Daily Trust, on its coverage of HIV/AIDS. The study content analyzed the newspaper to depict how the coverage of the disease is given priority in the region. Specific objectives of the study are to identify the Daily Trust's major sources of news on HIV/AIDS, identify how the types of HIV/AIDS, news are covered in the newspaper, identify the major HIV/AIDS themes of the news stories, and determine the prominence the newspaper gives to HIV/AIDS news. The study covers the newspaper issues published over three years from 2013-2015 and the first half of 2016, from which 170 stories were studied: news stories, features and editorials. Data was analyzed using descriptive statistics. Hypothesized relationships between pairs of key content categories were tested and Pearson Chi Square value was significant between Source of HIV/AIDS story and HIV/AIDS story treatment, between Coverage of HIV/AIDS Major Themes and HIV/AIDS Story

Presentation Taste, and between HIV/AIDS Source of Story and Geographic Focus of HIV/AIDS story. Findings also reveal that all HIV/AIDS stories were printed in the inside pages and none made front page headlines. There was also a shift from publishing grim HIV/AIDS figures to stories of hope and care for people living with HIV/AIDS. Most of the HIV/AIDS stories studied focused on urban centers and had no illustrations. It is therefore concluded that despite the importance of the disease which poses a challenge to development, HIV/AIDS is not given adequate coverage and attention by the press in Northern Nigeria

Key words: Coverage; HIV/AIDS; Newspaper; Northern Nigeria; Stories

Introduction

Two decades after the emergence of HIV/AIDS (Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome), precisely in 2002, the Kaiser Foundation published a detailed study of the press coverage accorded to the disease in America. After examining 9000 stories the study concluded that, lately, there was a kind of 'AIDS fatigue' on the part of the US media. Journalists have also reported facing difficulty in convincing their editors to run HIV/AIDS stories, partly because the disease has been considered just like any other disease, while actually it is still the major cause of death among African Americans aged between 25-44 years. In most studies on the press coverage of HIV/AIDS the common denominator was emphasis on seeking new angles and ways to convey or tell the story (Cullen, 2006). A respected former journalist of Papua New Guinea, Anna Solomon declared that "AIDS is a boring report, so let's try to make it interesting" (Cullen, 2006: 11) thereby encouraging colleagues to use imagination, sensitivity and initiative to convey messages about the disease.

Submissions by the Kaiser foundation and Anna Solomon clearly suggest that there is a growing paucity of HIV/AIDS reports from the press suggesting that the disease is no longer a serious life threatening epidemic. This situation clearly indicates the need for constant monitoring of press coverage on the disease to determine whether the situation has really changed or if there is a need for drastic improvement over coverage, angles, emphasis and dimensions to halt and reverse the prevalence. Conversely, the news media has undoubtedly served as a crucial source for disseminating information about the disease. 72 per cent of the US public reported that greater part of the information they received about HIV/AIDS comes from the media namely newspaper, radio and television (Brodie, et al., 2004). Similarly a national survey in India showed more than 70% of respondents indicated that they received their information on HIV/AIDS from television (ibid)

Recent evidence about the spread of the epidemic worldwide in 2006 and 2015 showed that it is slowing down globally even though new infections continue to increase in some countries or regions based on data from 126 countries (Global AIDS Initiative, 2015). More than 65 million people have been infected and about 25 million killed by the disease since the first diagnosis in 1981. In 2014, almost 37 million people were living with it globally and the number living with it kept rising because the number of deaths fell due to the discovery and treatment with antiretroviral drugs, to which more and more people are getting access to treatment globally. In sub Saharan Africa in 2014, about 790,000 people died of HIV related illnesses and there are about 29 million people living with it (about 70 percent of the world's burden). In Nigeria in 2013, 3.2 million were diagnosed as living with the disease, alongside 220,000 new infections in that year alone.. The country carries 9 percent of the global burden. Available data shows

that from 2005 to 2013, Nigeria, South Africa and Uganda accounted for almost half of all new infections in sub-Saharan Africa. (Joint United Nations Programme on HIV/AIDS, UNAIDS, 2013)

Evidence of press coverage of HIV/AIDS in US, Australia, Britain and France throughout the 1980s revealed a common pattern- initial slow response in terms of coverage, then a heightened coverage in recognition of the emerging risk of spread followed by a gradual decline because of what was referred to as 'routinization' of the disease i.e. treating it as any other health issue. These three categorizations gradually gave effect to varying degrees of sensationalism, stereotyping and complacency in coverage and proved inadequate relative to actual scourge of the epidemic in many countries (Cullen, 2003).

Similarly, other studies that focused on developing countries merely emphasized on the contents of news stories rather than frequency. Not much attention was paid to discern emerging patterns of coverage, for example, Pitts & Jackson (1993) in Zimbabwe, Kasoma (1995) in Zambia and Cullen (2007) in Papua New Guinea. A similar trend to the Western pattern of reporting was noticed though this 'rise-peak-decline' trend, which was not a conscious or deliberate decision on the part of journalists or newspaper editors. In Nigeria, a study of Daily Times of Nigeria and the Nigerian Tribune released in 2008 showed a slow coverage in the 90s and an accelerated one in the 2000s (Komolafe-Opadeji, 2008) though the author noticed some inconsistencies in the frequency of reports which were higher in the months of February and December and generally lower in other months. Apparently, there seems to be no recent study on the subject in the country, to compare results.

Having studied more than 9000 stories, Brodie, et al. (2004) observed that coverage on the subject upped during the early and mid-eighties, peaked in 1987 and slowed thereafter gradually, up until 2002, and further stated that minor peaks were observed in a similar pattern to that in Nigeria, during major events like the declaration by Magic Johnson in 1991 that he had AIDS, and the introduction in 1996 of the antiretroviral therapy etc.

The study found that the dominant story themes then were prevention and protection (18%), transmission of the virus (13%), research (13%), and then social issues like stigma and discrimination (10%). And there was little concerning education. But in the earlier period between 1981 to 1986, educational information about HIV/AIDS stood at 48%, and then this figure dipped dropped in the period 1987 to 1990 and has continued to drop since (Brodie, et al. 2004)

Newspaper coverage of HIV/AIDS in the region worst hit by the epidemic - the southern African countries - was extensively researched by Panos Institute in a study conducted in eight countries in this region: Zambia, Zimbabwe, Namibia, Lesotho, South Africa, Botswana, Swaziland and Malawi in 2003. In the study also, tremendous improvement in coverage was noticed in the 80s with stories gradually becoming sensational and then, insensitive to those affected by the HIV/AIDS epidemic. In the 90s, such military metaphors as 'killer disease' and 'HIV/AIDS victims' gave way to more humane and sensitive expressions such as 'people living with AIDS.' Gradually, HIV/AIDS news reports came to be viewed as developmental rather than just health issues (Panos 2004) as this paper attempts to posit by relying on the Development Media Theory. This period witnessed more stories of hope rather than illustrations

of despair with pictures of emaciated people and scary statistics, thus gradually becoming less preponderant (ibid). Majority of these news reports were also about workshops, speeches and conferences just as had happened in the West, as reported by Brodie, et al. (2004). Later on Panos, (2004) concluded that the corpus of HIV/AIDS reports omitted the voices of those affected and became 'monotonous and less appealing to readers'

Against this backdrop, this study aims to investigate the patterns of HIV/AIDS coverage in the Daily Trust newspaper. This newspaper was the only regular and consistent newspaper in the whole of Northern Nigeria, with the specific objectives of identifying the major sources of news on HIV/AIDS; identifying the new types of HIV/AIDS viruses; identifying the major HIV/AIDS themes and determining the prominence of HIV/AIDS news. In addition, the study will also test the relationship between pairs of key content categories, hence the relationships are hypothesized thus:

- H1 Source of HIV/AIDS stories in the press (Daily Trust) will be significantly related with Geographic focus of the stories.
- H2 Source of HIV/AIDS stories will be significantly related with New Treatment Types of stories
- H3 Source of HIV/AIDS story will be significantly related with New Types of HIV/AIDS stories
- H4 Major Themes of HIV/AIDS reports will be significantly related with News Report Presentation Taste
- H5 Major Themes of HIV/AIDS report will be significantly related with Tone of HIV/AIDS story
- H6 Major Themes of HIV/AIDS report will be significantly related with HIV/AIDS story page quadrant placement.

Media Role in HIV/AIDS

There has always been a rift between the perceived role of the journalist and that of the health professional in relation to HIV/AIDS. Mellwaine (2001) states that the priorities of the journalist differs from those of health professionals; while journalist are interested in the sensational, the human interest and the dramatic angle, the health professional may deemphasize those aspects. Delineating this tension, Lupton et al. (1993 p.6) referred to journalists by stating that their 'task is to sell their commodity-news- not to serve as campaigning arm of health educators'. According to the authors, the manner in which journalists report issues such as HIV/AIDS can, "therefore detract from the goals of health educators".

However, the ideal role of media in combatting HIV/AIDS has been aptly summarized by UNAIDS (2004) as "education is the vaccine against HIV", hence it is in the interest of this study to measure the form and dimension of Daily Trust newspaper coverage in terms of educating the public. The importance of HIV education is underscored by the influence of education in empowering individuals to prevent contracting the disease (Global AIDS Initiative, 2015). The specific roles of media include talking about the disease, creating support and enabling environment, challenging stigma and discrimination, promoting HIV/AIDS services, educating through entertainment, mainstreaming HIV/AIDS messages, emphasizing HIV/AIDS on the news agenda and pushing leaders to act (ibid).

Talking about the disease and creating support and enabling environment presupposes unlocking all channels of communication, thereby addressing cultural norms and confronting existing values and social norms which are hurdles to opening up about the disease. And this can be achieved through 'education through entertainment' (edutainment). In Tanzania for example, it has been observed that a radio soap opera *Twendi na Wakati*, meaning "Let's go with the Times" substantially increased the willingness of listeners to openly communicate on the issue of HIV/AIDS.

Stigma and discrimination have been identified over time as a driving force for the HIV epidemic; it has then become the role of the media to eradicate prejudice against, and encourage solidarity with PLWHA. Effective collaboration between the press and community organizations, government agencies and social service providers can foster HIV/AIDS counseling, voluntary testing, care giving and treatment.

To achieve optimal HIV/AIDS messaging output, media organizations need to imbibe mainstreaming the disease in a number of programmes, not just programmes that are solely dedicated to it. This can be justified by the fact that the epidemic affects all facets of life. Putting the disease on the news agenda and encouraging leaders to act, potentially creates a fertile political climate for the 2030 vision of eradicating the disease. This can also be achieved by making it a news priority (in both selection and prominence).

Character of Press Coverage of HIV/AIDS

The gamut of evidence of reportage in developing countries adduced so far indicated that reportage substantially tilted towards rates of infection, international funding and workshops taking place across different regions, without in-depth interpretation and analysis of the disease or reporting its political, social, economic, medical, cultural and religious dimensions (Panos Institute, 2004).

In Nigeria also, Komolafe-Opadeji (2008) pointed out that coverage of HIV/AIDS by the Nigerian press prioritized issues pertaining to rate of infection and workshops. And by contrast, the report of Kaiser Foundation, (2004), showed that 36% of all news stories on HIV/AIDS in the United States press concentrated on educating people on preventive measures.

The language of reporting HIV/AIDS generally in the press employed the use of metaphors to make sense of the disease during the early stage of its construction into public consciousness (Ross & Carson, 1988; Sonitag, 1989). The press particularly used military metaphors such as 'invasion', 'battle', 'enemy', 'struggle', 'fight', 'war', etc. HIV/AIDS was labelled as a foreign invader, which necessitated people to devise methods to protect themselves. As criticism of these military metaphors peaked because of their likelihood to attribute fault to patients, new metaphors emerged ('guilty' vs. 'innocent') into the discourse. In this case, the 'innocent' were tagged as 'victims', insinuating that others are guilty of infecting them. (Sonitag, 1989: 10).

Lupton (1994: 136) subsequently highlighted that people living with HIV/AIDS are labelled with adjectives such as 'deviants', 'innocent', 'victims', 'sufferers', 'battlers', 'survivors', 'promiscuous', 'homosexuals', and 'drug addicts' and this choice of words affect the way audiences construct meaning to attitudes and knowledge about the patients and the disease generally.

In studying media coverage of HIV/AIDS, the focus is mostly on the press rather than the wider spectrum of mass media. This is mainly due to the fact that access to archival print resources was easier and more effective than that of broadcast records or transcripts, trawling through which becomes arduous, because of their unavailability at times. Newspapers have greater effectiveness because news stories online or in print are mostly used by television and radio journalists and editors to give background or even actual content to their daily broadcast news services.(Cullen, 2003).

Theoretical Framework

This study is based on the Development Media Theory propounded by Dennis Mc Quail in 1989. The main thrust of the Development Media Theory, apart from focusing on the tenets of free press, advocates media's involvement in social and economic development programmes and policies in developing countries (Odorume, 2015). According to Mc Quail, among other issues, the theory comprises the following major tenets:

- * Media must accept and carry out positive development tasks that are in line with the policies formulated by the political leadership and freedom of the press should not be at variance with economic priorities of the government and the development needs of the citizenry.
- * Media should therefore give priorities to the coverage of those areas that touch on the lives of the people. In other words, content should be development-driven and should center on socio-economic and political lives of the people (Odorume 2015).

Okunna (1999) in Odorume (2015) in expounding the theory posited that the real essence of the Development Media Theory requires that the mass media subjugate themselves to social, political, economic, cultural and health needs of a developing nation as articulated in several government policies.

Evidence from this content analysis study will show how mass media are adhering to the tenets of Development Media Theory in relation to HIV/AIDS coverage by the press in Northern Nigeria.

Materials and Methods

Daily Trust newspaper being the only consistent longest surviving newspaper serving the entire northern Nigeria was considered. The newspaper reports on HIV/AIDS were content analyzed
Units of analysis

The units of analysis for this study were the news stories editorials and features in the newspaper. The study will consider whole stories, not paragraphs or sentences in stories.

Index Search Word/ Phrase

The index phrases/words that will be searched in headlines news stories, feature articles and editorials to determine a HIV/AIDS story are: Acquired Immunodeficiency Syndrome, HIV, AIDS, HIV/AIDS, anti-retroviral, mother-to-child transmission, HIV screening, condom protection and PLWH. In the Hausa version of the newspaper, *Aminiya* index search words are: *kanjamau, Tsida, ciwo mai karya garkuwan jiki*.

Population

The population of this study includes all the *Daily Trust* editions from 1st January, 2013 to 30 June 2016, i.e. $365 \times 3 = 1,095 + 183 = 1278$. *Weekly Trust* and *Sunday Trust* (weekend editions of the newspaper) are included.

Sample Size

For robust analysis, a census of HIV/AIDS stories was considered across the 3.5 years and a total of 170 HIV/AIDS stories were considered.

Content categories

Requirement on content categories that they be mutually exclusive and exhaustive was strictly adhered to. Extensive literature reviews were done on newspaper coverage of HIV/AIDS issues such as in Lupton, D., Chapman, S., & Wong, W. 1993; Pitts & Jackson 1993; Kasoma, 1995 Cullen, 2004; Panos, 2004; Ann & Drew, 2004; Komolafe-Opadeji, 2008 and Cullen, 2011. The content categories for this study were developed: (1) Type of HIV/AIDS Story Treatment (a) News story (b) Feature (c) Editorial; (2) Sources of HIV/AIDS news stories (a) Government (b) NGO (c) UN/WHO/UNICEF or other related international organizations (d) Community (e) Academic Institutions (f) Experts (g) Hospitals (h) others; (3) Major news type of stories (a) Informative (b) Educative (c) Awareness (d) Advocacy (e) Interpretative; (4) HIV/AIDS major themes (a) Mode of transmission (b) Risky practices (c) Stigmatization (d) Care for people living with HIV/AIDS (e) Campaign strategies (f) Hospital (g) Treatment and access to treatment (h) Prevention (i) Policy issues (j) Others; (5) Placement Prominence given to HIV/AIDS reports (a) Front page (b) Back page (c) Editorial page (d) Other inside pages; (6) News report presentation taste (a) Interesting (b) Uninteresting (c) Neutral; (7) News Topic (a) Workshop (b) Conference (c) Budget (d) Donation (e) Speech (f) HIV/AIDS figures; (8) Focus of story (a) Event-oriented (b) Individual-oriented; (9) Geographic Focus (a) International (b) local (c) State (d) National; (10) Page Emphasis (Quadrant) (a) Upper right quarter (b) Upper left quarter (c) Lower right quarter (d) Lower left quarter; (11) Tone of story (a) Scary (b) non-scary; (12) Location Focus (urban/ rural) (a) Urban (b) Rural; (13) Illustration (a) Illustrated with graphics (b) Not Illustrated.

Level of Category Measurement

All variables were measured at nominal level except for story placement prominence (front page, back page, editorial page and back page hierarchy), page quadrant story placement (upper left, upper right, lower left, lower right hierarchy) which were measured at ordinal level.

Inter Coder Reliability

Inter coder reliability being a measure that determines how coders classify items in the same way to ensure or estimate the likelihood that the coders of content classify the content consistently; inter coder reliability test *Krippendorff's Alpha* was performed in this study and no significant differences were found in how the coders classified content under the variables.

Selected HIV/AIDS stories were coded and overall inter coder reliability exceeded 80% for all variables.

Instrument of data collection

Data were entered in coding forms.

Press Coverage of HIV/AIDS in Northern Nigeria: Results and Discussion HIV/AIDS Story Type

The classification of the stories studied as depicted by Table (I) below showed that 84% were straight news stories and 16% were feature and none was an editorial. This dearth of interpretation reports on AIDS clearly showed that the scourge of AIDS had not been adequately subjected to analysis by both journalists and experts. By extension, this situation further grossly limits the quantum of AIDS education and awareness in the general media audience, and reflects all the more, the kind of attention this deadly epidemic receives from the press.

Table 1

HIV/AIDS Story Type

Story Type	Frequency	Percent
News story	143	84.1
Feature	27	15.9
Total	170	100.0

HIV/AIDS News Types

This study also found that 42% of the HIV/AIDS stories are information, education is 15%, awareness 9%, interpretation 12 % and 23 % percent is advocacy as shown in Table (2) below. Judging this finding with Christiansen and Harding's (1984) concept of Mobilizing Information (MI) which entails the press giving information that could be translated into meaningful health behavior, or actions as key to success in combatting HIV/AIDS, it could be said that the press have done fairly well. After conducting an extensive research in Britain, Christiansen and Harding (1984) observed that paucity of MI affected the impact of press messages. They argued that such MI communications tend to promote a particular behavior when specific details about action that can prevent health threats are explicitly given (p. 164). However Cullen, (2000) found that editors prefer to focus on the issue rather than facilitate public participation.

Table 2

HIV/AIDS News Types

News Types	Frequency	Percent
Informative	71	41.8
Educative	25	14.7
Awareness	15	8.8
Interpretation	20	11.8
Advocacy	39	22.9
Total	170	100.0

Coverage of HIV/AIDS Major Themes

Findings here reveals that only 7% of the HIV/AIDS stories are on HIV modes of transmission as shown in Table 3. The philosophy of press reportage of HIV modes of transmission is chiefly to educate audiences about the salient ways one gets infected by the HIV virus, thereby generating the required protective behavior among them. The major themes that get the largest coverage are Care for People Living with HIV/AIDS (33%) followed by Media Campaign Strategies at 17%. Conspicuous irony in the results is HIV prevention stories which are the most important, yet figure at only 6%. In an ideal situation, since prevention is considered the only vaccine against HIV transmission, such stories should have occupied a larger percentage, followed by themes on educating audiences about modes of transmission and risky practices. Just as indicated by Kasoma (1993), AIDS should attract maximum publicity in the press in terms of how it is acquired and its general protective education. But as much as he hypothesized the aforementioned in the Zambian press, his hypothesis did not tally with his content survey of the newspapers he studied. The stories in this study were also found to be mostly (69%) event oriented, while only 31% focused on different individuals as shown in table 4 below.

Table 3
Coverage of HIV/AIDS Major Themes

Major Themes	Frequency	Percent
Modes Transmission	71	41.8
Risky practice	11	14.7
15	6.5	8.8
8.8	20	11.8
Stigmatisation	16	9.4
Care for people with HIV/AIDS	56	32.9
Media & Campaign strategies	29	17.1
Hospital	6	3.5
Treatment and access to treatment	12	7.1
Preventive measures	10	5.9
Policy issues on HIV/AIDS	3	1.8
Others	12	7.1
Total	170	100.0

Table 4
HIV/AIDS story focus

Story Focus	Frequency	Percent
Event oriented	118	69.4
Personality oriented	52	30.6
Total	170	100.0

Sources of HIV/AIDS Story

In Table 5 below, 38% of the stories studied came from the government, 21% from NGO while 4% came from the community. Conspicuously, UN/UNICEF/IOs contributed only 9%. This finding is closely similar to the finding by Osita (1993) in which he reported that the government contributed 34% of the stories he studied, while WHO, 7%. Invariably this means the trend has not changed since the 90s. This finding in part shows that the government seems to be carrying out its responsibility in terms of considering HIV/AIDS a threat to national development, thereby giving the public constant information about the disease.

Table 5

HIV/AIDS story focus

Source of Story	Frequency	Percent
Government	65	38.2
NGO	35	20.6
Community	7	4.1
UN/WHO & IOs	16	9.4
Higher Institution of learning/ research institute	5	2.9
Hospital	4	2.4
Experts	23	13.5
Others	15	8.8
Total	170	100.0

Placement Prominence of HIV/AIDS Story

Wilkins and Patterson (1987) stated that the frequency, volume or number of stories are not the major yardstick for measuring the importance a newspaper gives to an issue, but where or on which page the newspaper places the story. Concerning the prominence given to HIV/AIDS stories relative to other stories, 3.5 years ago the Daily Trust as shown in Table 6, published only 1 HIV/AIDS story (6%) on its front page; 3 stories (2%) on its back page; and 8 stories (5%) on its editorial page which are considered to be the most important pages in a newspaper in that order, which the reader first goes to. This study finds that all the HIV/AIDS stories under examination fall in 'other inside pages', indirectly suggesting that such stories are not considered by the editors to be any more important than the other stories carried by the newspaper. This further suggests that HIV/AIDS stories merely surpassed the newspaper's editorial judgment - that of being selected as news story only. This particular trend seems to be forming a pattern in Africa where statistics show the largest burden of HIV/AIDS falls; because earlier on Kasoma (1991) in a study of two Zambian newspapers submitted that

There is overwhelming evidence that the two newspapers did not regard AIDS with the importance it deserved as a killer disease with the potential to wipe out the entire population. Only two per cent of the AIDS news stories were used as page one, nearly all of them placed low on the page and not as leads. Only eight percent of AIDS news stories featured as leads in any of the two newspaper stories.

However in terms of inside page emphasis, HIV/AIDS stories occupied strategic positions (upper right 38% and upper left 28%) as indicated in Table 7 below. As far as page quadrant placement in the inside pages is concerned, HIV/AIDS stories were given some degree of importance.

Table 6
Placement Prominence of HIV/AIDS Stories

Placement	Frequency	Percent
Front page	1	.6
Back page	3	1.8
Editorial page	8	4.7
Others inside pages	158	92.9
Total	170	100.0

Table 7
Page Quadrant Placement

Quadrant	Frequency	Percent
Upper right quarter	64	37.6
Upper left quarter	47	27.6
Lower right quarter	28	16.5
Lower left quarter	31	18.2
Total	170	100.0

News Report Presentation Taste

Findings here reveal that 46 % of stories on HIV/AIDS were interesting, as shown in Table 8. Most of the uninteresting stories portrayed the government as being inactive, sometimes even ridiculing those in charge by suggesting that they should do more to improve the nation's medicare systems and procure sufficient quantities of blood testing kits.

Most interestingly, HIV/AIDS stories extolled government funding of AIDS programmes. These stories also detailed foreign funding endeavours, especially donations from the US government or other international agencies.

Table 8
News report presentation taste

presentation taste	Frequency	Percent
Interesting	78	45.9
Uninteresting	38	22.4
Neutral	54	31.8
Total	170	100.0

Geographic focus of HIV/AIDS stories

This study finds that 42% of the stories were local while 24 % were international as indicated in Table 9 below. Stories with international focus tripled stories with national focus, which appears to be a gross undermining of the tenets of Development Media Theory which favors local emphasis on national issues and aspirations that bring progress to the nation. This finding is also a radical departure from what used to be the trend in the 1990s because then, the African media relied mostly on wire services for their stories on HIV/AIDS, while the international media provided better and wider coverage on HIV/AIDS stories than local media. For example Kasoma (1990) discovered that the earlier coverage of the disease relied heavily on news from overseas and there was imbalance between local news and foreign news of HIV/AIDS (a ratio of 40% : 60% respectively). In PapuaNew Guinea also, Culen (2006) found that foreign news stories on Aids were the main sources and focus until the mid-1990s when emphasis began to shift to local stories or focus. Osita (1993 : 51) also observed that Nigeria's print media, to a large extent (40%) relied on foreign based news services for their stories on AIDS. Kasoma (1990) attempted to explain that the reasons for this scenario could be attributable to the Zambian press who were trying in the earlier stages to portray HIV/AIDS as 'not so much here' but 'out there'.

Table 9

Geographic Focus of HIV/AIDS Stories

Geographic focus	Frequency	Percent
International	41	24.1
Local	71	41.8
State	44	25.9
National	14	8.2
Total	170	100.0

Story Topic

As Table (10) below shows, 26% of the news topics are on HIV/AIDS figures and 22% on HIV/AIDS workshops .This shows that the HIV/AIDS figures is on a downward trend. HIV/AIDS death figures were rarely mentioned in the stories - Pitts and Jackson (1993: 223) reported that it is a gross underestimate of the scale of the problem since AIDS has remained the commonest cause of death in major hospitals in Zimbabwe, directly suggesting that while AIDS related illnesses are the major cause of death, rate of incidence does not match the rate of reportage.

Table 10
Story Topics

Topic	Frequency	Percent
HIV/AIDS Figures	44	25.9
Workshops	38	22.4
Budget	12	7.1
Donation	21	12.4
Speeches	34	20.0
Conference	21	12.4
Total	170	100.0

Location Focus of HIV/AIDS Stories

The result of this study shows that 77% of the AIDS stories focused on urban centers while only 23% focused on rural areas as shown in Table 11 below. This is a scenario that constructs the HIV/AIDS disease as a scourge of the urbanites which is a paradox since the population distribution in Nigeria is predominantly rural. This result also aligns with and confirms the dominant trend that the mass media gives more coverage to urban areas as observed by Nwosu (1990). A serious health concern like AIDS deserves comprehensive coverage at the grassroots and not depict a misleading picture that gives the impression that AIDS affects mostly people in the urban areas and is not a serious problem in rural areas.

Table 11
Location Focus of HIV/AIDS Stories

Topic	Frequency	Percent
Urban	44	25.9
Rural	40	23.0
Total	170	100.0

Tone of HIV/AIDS Stories

It was found that there is improvement in the language used by the press to refer to HIV/AIDS: 41% of the stories studied were non scary, positively depicting how patients successfully cope with the disease. Table 12 shows that among the stories, only 59% were scary. In Zimbabwe for instance, just as in North America, Australia and Europe, the use of military metaphors held sway (Sonitag, 1989). Pitts and Jackson(1993) observed that the continuous use of negative language contributes naught in terms of convincing people about building hope for living long with treatment.(p.223) The preferred words used to be “fight against AIDS,”“AIDS war,” “AIDS time bomb,” “menace,” “plague,” - this study finds that the stories are now less scary than before, and mostly emphasize on Hope - to live a longer and meaningful life if the disease is managed well by regular treatment and healthy diet and lifestyle.

Table 12

Tone of HIV/AIDS Story

Tone	Frequency	Percent
Scary	99	58.2
Non scary	71	41.8
Total	170	100.0

Illustration for HIV/AIDS Stories

Table 13 below shows that 80% of the HIV/AIDS stories were not supported with illustrations while 20% were. And there were no cartoons to support any HIV/AIDS story. The over dominance of stories that were not illustrated by any photographs and/or other illustrative devices further denote inadequate and poor reporting; no effort was made to make these stories effective in terms of awareness and advocacy.

Table 13

Illustration for HIV/AIDS Stories

Illustration	Frequency	Percent
With illustration	34	19.7
Without illustration	136	80.3
Total	61	100.0

Cross tabulations of Content categories and Chi Square Tests

From the data obtained, further inquiry was made through cross tabulations to determine other dimensions of useful information in the HIV/AIDS story content of the Daily Trust. As discussed, cross tabulation of key variables which relationships appear to be predicted by literature were carried out between 'Source of HIV/AIDS Story' and 'Geographic Focus of HIV/AIDS Story'; between 'Story Treatment Type' and 'Source of HIV/AIDS Story'; between 'Source of HIV/AIDS Story' and 'News Type of HIV/AIDS Story'; between 'Major Themes of HIV/AIDS report' and 'HIV/AIDS Story Presentation Taste'; between 'Source of HIV/AIDS Story' and 'HIV/AIDS Story News Type' and between 'Major themes of HIV/AIDS reports' and 'Tone of Story' and between 'HIV/AIDS Major Themes' and 'Page Quadrant emphasis'. Further, Chi Square tests were performed to determine the significance of the independence of the variables from their pairs.

Table 14
Source of HIV/AIDS Story and Story Geographic focus Cross tabulation

Source of story		Geographic focus				
		International	Local	State	National	Total
Government	Count	12	29	19	5	65
	% within Source of story	18.5%	44.6%	29.2%	7.7%	100.0%
	% within Geographic focus	29.3%	40.8%	43.2%	35.7%	38.2%
NGO	Count	5	16	8	6	35
	% within Source of story	14.3%	45.7%	22.9%	17.1%	100.0%
	% within Geographic focus	12.2%	22.5%	18.2%	42.9%	20.6%
Community	Count	1	3	2	1	7
	% within Source of story	14.3%	42.9%	28.6%	14.3%	100.0%
	% within Geographic focus	2.4%	4.2%	4.5%	7.1%	4.1%
UN/WHO & IOs	Count	9	7	0	0	16
	% within Source of story	56.3%	43.8%	0.0%	0.0%	100.0%
	% within Geographic focus	22.0%	9.9%	0.0%	0.0%	9.4%
Higher Institution of learning/ research institute	Count	2	2	1	0	5
	% within Source of story	40.0%	40.0%	20.0%	0.0%	100.0%
	% within Geographic focus	4.9%	2.8%	2.3%	0.0%	2.9%
Hospital	Count	3	0	0	1	4
	% within Source of story	75.0%	0.0%	0.0%	25.0%	100.0%
	% within Geographic focus	7.3%	0.0%	0.0%	7.1%	2.4%
Experts	Count	7	7	8	1	23
	% within Source of story	30.4%	30.4%	34.8%	4.3%	100.0%
	% within Geographic focus	17.1%	9.9%	18.2%	7.1%	13.5%
Others	Count	2	7	6	0	15
	% within Source of story	13.3%	46.7%	40.0%	0.0%	100.0%
	% within Geographic focus	4.9%	9.9%	13.6%	0.0%	8.8%
Total	Count	41	71	44	14	170
	% within Source of story	24.1%	41.8%	25.9%	8.2%	100.0%
	% within Geographic focus	100.0%	100.0%	100.0%	100.0%	100.0%

From Table 14 above, a noticeable, interesting trend shows that in all the Sources of Stories except Hospital, Local Focus HIV/AIDS stories has the highest percentage : Government 45%, NGO 46%, Community 43%, UN/WHO & IOs 44%, Higher Institution of learning/ research institute 40%, Experts 30% and others 47%. This trend is quite the reverse of the geo focus of HIV stories as it was obtained at the inception of the disease in which the focus of stories was the international arena, as discussed in the literature review of this article. Emphasis on local focus may have the potential of locally setting an agenda on prevention. As expected, stories from WHO/UNICEF and International Organizations have the highest International focus of 56%. Chi Square test (to calculate how different the observed distributions are from expected distribution) was conducted to determine the significance of the differences in the cells of the table. The Pearson Chi Square row in Table 15 below has the significance value of .036 which means that the variables (categories) Source of story and Geographic focus are not independent, hence H1 is supported,

Table 15
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.044a	21	.036
Likelihood Ratio	39.367	21	.009
Linear-by-Linear Association	1.664	1	.197
N of Valid Cases	170		

Table 16
Source of story and Story Treatment Cross tabulation

Source of story		Story type		Total
		news story	feature	
Government	Count	61	4	65
	% within Source of story	93.8%	6.2%	100.0%
	% within story type	42.7%	14.8%	38.2%
NGO	Count	32	3	35
	% within Source of story	91.4%	8.6%	100.0%
	% within story type	22.4%	11.1%	20.6%
Community	Count	7	0	7
	% within Source of story	100.0%	0.0%	100.0%
	% within story type	4.9%	0.0%	4.1%
UN/WHO & IOs	Count	15	1	16
	% within Source of story	93.8%	6.3%	100.0%
	% within story type	10.5%	3.7%	9.4%
Higher Institution of learning/ research institute	Count	4	1	5
	% within Source of story	80.0%	20.0%	100.0%
	% within story type	2.8%	3.7%	2.9%
Hospital	Count	4	0	4
	% within Source of story	100.0%	0.0%	100.0%
	% within story type	2.8%	0.0%	2.4%
Experts	Count	12	11	23
	% within Source of story	52.2%	47.8%	100.0%
	% within story type	8.4%	40.7%	13.5%
Others	Count	8	7	15
	% within Source of story	53.3%	46.7%	100.0%
	% within story type	5.6%	25.9%	8.8%
Total	Count	143	27	170
	% within Source of story	84.1%	15.9%	100.0%
	% within story type	100.0%	100.0%	100.0%

More than 90% of stories in each category of source of story is news story except for stories from experts which is almost half the news stories (52%) and half (48%) feature which is quite expected as experts likely, most of the time, attempt to be analytical or interpretative about the HIV/AIDS epidemic. Table 16 above further shows that across all the categories of HIV/AIDS story sources, feature stories are overwhelmingly lacking, which is suggestive of lack of concerted effort to demystify and interpret issues about the disease that will make northern

Nigerians come to terms with it and support people living with it. Table 17 below also shows a Chi Square test to determine the independence between Source of story and Story type. Pearson Chi Square significance value .000 indicates that Source of HIV/AIDS story and HIV/AIDS story type are also not independent even if at .01 alpha. H2 is also supported.

Table 17
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37.464a	7	.000
Likelihood Ratio	33.239	7	.000
Linear-by-Linear Association	28.256	1	.000
N of Valid Cases	170		

Except for stories from Community which are 57% advocacy based, as Table 18 shows, information news type takes the greater percentage across all the HIV/AIDS story sources (more than 50%). Again this shows a lack of effort by almost all the HIV/AIDS news sources to go beyond information into education and advocacy which is tantamount to a negation of the principles or prescription of Development Media Theory. The Pearson Chi Square significance value .255 in Table 19 below shows that the difference between observed distribution and expected distribution among the cells is not significant, therefore Sources of HIV/AIDS stories and news type of stories are independent at .05 alpha, therefore H3 is rejected.

Table 19
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	36.838a	32	.255
Likelihood Ratio	38.295	32	.205
Linear-by-Linear Association	.378	1	.539
N of Valid Cases	169		

a. 33 cells (73.3%) have expected count less than 5. The minimum expected count is .18.

Table 20

Major themes of HIV/AIDS Report and News Report Presentation Taste Cross tabulation

Major themes of HIV/AIDS repor		HIV/AIDS news report presentation taste			
		<i>Interesting</i>	<i>Uninteresting</i>	<i>Neutral</i>	<i>Total</i>
Modes Transmission	Count	5	2	4	11
	% within Major themes of HIV/AIDS Report	45.5%	18.2%	36.4%	100.0%
	% within Direction of story	6.4%	5.3%	7.7%	6.5%
Risky practice	Count	6	2	7	15
	% within Major themes of HIV/AIDS Report	40.0%	13.3%	46.7%	100.0%
	% within Direction of story	7.7%	5.3%	13.5%	8.9%
Stigmatisation	Count	7	4	5	16
	% within Major themes of HIV/AIDS Report	43.8%	25.0%	31.3%	100.0%
	% within Direction of story	9.0%	10.5%	9.6%	9.5%
Care for people with HIV/AIDS	Count	22	19	15	56
	% within Major themes of HIV/AIDS Report	39.3%	33.9%	26.8%	100.0%
	% within Direction of story	28.2%	50.0%	28.8%	33.3%
Media & Campaign strategies	Count	13	1	15	29
	% within Major themes of HIV/AIDS Report	44.8%	3.4%	51.7%	100.0%
	% within Direction of story	16.7%	2.6%	28.8%	17.3%
Hospital	Count	4	2	0	6
	% within Major themes of HIV/AIDS Report	66.7%	33.3%	0.0%	100.0%
	% within Direction of story	5.1%	5.3%	0.0%	3.6%
Treatment and access to treatment	Count	7	4	1	12
	% within Major themes of HIV/AIDS Report	58.3%	33.3%	8.3%	100.0%
	% within Direction of story	9.0%	10.5%	1.9%	7.1%
Preventive measures	Count	6	4	0	10
	% within Major themes of HIV/AIDS Report	60.0%	40.0%	0.0%	100.0%
	% within Direction of story	7.7%	10.5%	0.0%	6.0%
Policy issues on HIV/AIDS	Count	3	0	0	3
	% within Major themes of HIV/AIDS Report	100.0%	0.0%	0.0%	100.0%
	% within Direction of story	3.8%	0.0%	0.0%	1.8%
Others	Count	5	0	5	10
	% within Major themes of HIV/AIDS Report	50.0%	0.0%	50.0%	100.0%
	% within Direction of story	6.4%	0.0%	9.6%	6.0%
Total	Count	78	38	52	168
	% within Major themes of HIV/AIDS Report	46.4%	22.6%	31.0%	100.0%
	% within Direction of story	100.0%	100.0%	100.0%	100.0%

Table 20 above shows that across all the HIV/AIDS major themes, a greater percentage of stories are ‘Interesting’ in most themes, about 50%. This trend reflects an improvement over HIV/AIDS news treatment by journalists as Ann Solomon who observed that “ HIV/AIDS stories are boring... let’s try to make them interesting.’ She was actually admonishing journalists. This analysis indicates that newspaper journalists and editors adhere to professionalism by making the HIV/AIDS stories interesting and inviting. The Pearson Chi Square significance value of .020 in Table 21 below was obtained for the test of independence between Major themes of HIV/AIDS reports and HIV/AIDS news report presentation, which means the difference between the actual distributions and expected distributions among the cells is significant. Hence Major themes of HIV/AIDS news reports are not independent of HIV/AIDS news report presentation; hence H4 is supported.

Table 21
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.436a	18	.020
Likelihood Ratio	42.460	18	.001
Linear-by-Linear Association	2.802	1	.094
N of Valid Cases	168		

Table 22

Major Themes of HIV/AIDS Report and Tone of HIV/AIDS Story

Major themes of HIV/AIDS Report and Tone of story Cross tabulation

Major themes of HIV/AIDS Report		Tone of story		
		Scary	Non scary	Total
Modes Transmission	Count	5	6	11
	% within Major themes of HIV/AIDS Report	45.5%	54.5%	100.0%
	% within Tone of story	5.1%	8.5%	6.5%
Risky practice	Count	7	8	15
	% within Major themes of HIV/AIDS Report	46.7%	53.3%	100.0%
	% within Tone of story	7.1%	11.3%	8.8%
Stigmatization	Count	7	9	16
	% within Major themes of HIV/AIDS Report	43.8%	56.3%	100.0%
	% within Tone of story	7.1%	12.7%	9.4%
Care for people with HIV/AIDS	Count	39	17	56
	% within Major themes of HIV/AIDS Report	69.6%	30.4%	100.0%
	% within Tone of story	39.4%	23.9%	32.9%
Media & Campaign strategies	Count	19	10	29
	% within Major themes of HIV/AIDS Report	65.5%	34.5%	100.0%
	% within Tone of story	19.2%	14.1%	17.1%
Hospital	Count	3	3	6
	% within Major themes of HIV/AIDS Report	50.0%	50.0%	100.0%
	% within Tone of story	3.0%	4.2%	3.5%
Treatment and access to treatment	Count	6	6	12
	% within Major themes of HIV/AIDS Report	50.0%	50.0%	100.0%
	% within Tone of story	6.1%	8.5%	7.1%
Preventive measures	Count	3	7	10
	% within Major themes of HIV/AIDS Report	30.0%	70.0%	100.0%
	% within Tone of story	3.0%	9.9%	5.9%
Policy issues on HIV/AIDS	Count	1	2	3
	% within Major themes of HIV/AIDS Report	33.3%	66.7%	100.0%
	% within Tone of story	1.0%	2.8%	1.8%
Others	Count	9	3	12
	% within Major themes of HIV/AIDS Report	75.0%	25.0%	100.0%
	% within Tone of story	9.1%	4.2%	7.1%
Total	Count	99	71	170
	% within Major themes of HIV/AIDS Report	58.2%	41.8%	100.0%
	% within Tone of story	100.0%	100.0%	100.0%

For all HIV/AIDS major themes, the percentage of scary and non-scary stories is almost half and half except for preventive measures which are 70% non-scary and 30% scary; care for people living with HIV/AIDS is 70% scary and 30% non-scary; and media campaign strategies of 66% scary and 34% non-scary are shown in Table 22 above. The general pattern of story tone indicates the need for improvement in the tone of HIV/AIDS stories to make them less frightening and make the prognosis of HIV/AIDS more positive by creating hope for those living with it. Pearson Chi square significance value .186 in Table 23 below shows a .05 level of significance; the relationship between the Daily Trust's coverage of HIV/AIDS Major Themes and Tone of HIV/AIDS stories as being scary or non-scary is not significant, thereby rejecting H5.

Table 23
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.504a	9	.186
Likelihood Ratio	12.620	9	.181
Linear-by-Linear Association	.122	1	.727
N of Valid Cases	170		

a. 6 cells (30.0%) have expected count of less than 5. The minimum expected count is 1.25.

Table 24

Major Themes of HIV/AIDS Report and Story Quadrant Cross tabulation

Major themes of HIV/AIDS Report		upper right quadrant	Upper quarter	eft- Lower right quarter	lower left quarter	Total
Modes	Count	5	6	2	0	11
Transmission	% within Major themes of HIV/AIDS Report	45.5%	54.5%	18.2%	0.0%	100.0%
	% within Quadrant	7.8%	8.5%	7.1%	0.0%	6.5%
Risky practice	Count	5	5	3	2	15
	% within Major themes of HIV/AIDS Report	33.3%	33.3%	20.0%	13.3%	100.0%
	% within Quadrant	7.8%	10.6%	10.7%	6.5%	8.8%
Stigmatization	Count	6	4	2	4	16
	% within Major themes of HIV/AIDS Report	37.5%	25.0%	12.5%	25.0%	100.0%
	% within Quadrant	9.4%	8.5%	7.1%	12.9%	9.4%
Care for people with HIV/AIDS	Count	20	11	9	16	56
	% within Major themes of HIV/AIDS Report	35.7%	19.6%	16.1%	28.6%	100.0%
	% within Quadrant	31.3%	23.4%	32.1%	51.6%	32.9%
Media & Campaign strategies	Count	11	5	5	8	29
	% within Major themes of HIV/AIDS Report	37.9%	17.2%	17.2%	27.6%	100.0%
	% within Quadrant	17.2%	10.6%	17.9%	25.8%	17.1%
Hospital	Count	4	1	0	1	6
	% within Major themes of HIV/AIDS Report	66.7%	16.7%	0.0%	16.7%	100.0%
	% within Quadrant	6.3%	2.1%	0.0%	3.2%	3.5%
Treatment and access to treatment	Count	4	7	1	0	12
	% within Major themes of HIV/AIDS Report	33.3%	58.3%	8.3%	0.0%	100.0%
	% within Quadrant	6.3%	14.9%	3.6%	0.0%	7.1%
Preventive measures	Count	2	6	2	0	10
	% within Major themes of HIV/AIDS Report	20.0%	60.0%	20.0%	0.0%	100.0%
	% within Quadrant	3.1%	12.8%	7.1%	0.0%	5.9%
Policy issues on HIV/AIDS	Count	1	2	0	0	3
	% within Major themes of HIV/AIDS Report	33.3%	66.7%	0.0%	0.0%	100.0%
	% within Quadrant	1.6%	4.3%	0.0%	0.0%	1.8%
Others	Count	6	2	4	0	12
	% within Major themes of HIV/AIDS Report	50.0%	16.7%	33.3%	0.0%	100.0%
	% within Quadrant	9.4%	4.3%	14.3%	0.0%	7.1%
Total	Count	64	47	28	31	170
	% within Major themes of HIV/AIDS Report	37.6%	27.6%	16.5%	18.2%	100.0%
	% within Quadrant	100.0%	100.0%	100.0%	100.0%	100.0%

An interesting irony presented by the trend in the Table 24 above are the themes with greater importance in terms of fighting HIV/AIDS Preventive Measures (60%) and Treatment and Access to Treatment (58%) are mostly deemphasized to second important page quadrant, upper left. Invariably this finding betrays a professional flaw in newspaper page design relating to emphasis. Aside from this noticeable trend, except for Policy Issues (67%) second quadrant, all other HIV/AIDS major themes have greater percentage of their placement at first priority page quadrant (upper right). Pearson Chi Square significance value which is below .145 as shown in Table 25 below, shows that HIV/AIDS major story themes and the newspaper page emphasis are independent. H₆ is rejected

Table 25
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.746a	27	.145
Likelihood Ratio	41.770	27	.035
Linear-by-Linear Association	1.271	1	.260
N of Valid Cases	170		

Conclusion and Recommendations

The predominance of news stories as against features presupposes that the press (Daily Trust) are reactive in reporting rather than proactive concerning reporting HIV/AIDS. More news stories means reporters and editors wait until events happen before they report them, while more features presuppose that editors and reporters look forward to reporting through extensive interpretation of context and situations regarding HIV/AIDS. Given that Africa south of Sahara is still bearing the largest burden of global HIV/AIDS, and that Nigeria, Uganda and South Africa house the largest number of new infections in the region, the press does not accord the disease the importance it deserves, thereby burying the stories of the epidemic in their inside pages. While it is safe to conclude from the results that the government seems to be doing the necessary in terms of giving HIV/AIDS the necessary attention via public communication, the government dwells mostly on just information rather than education or Motivational Information as Christiansen and Harding (1984) suggested. There is improvement in press coverage of HIV/AIDS themes depicting a shift from scary figures to stories of hope and care for people living with HIV/AIDS, indicating a shift from the trends observed in other regions of the world by Brodie et al. (2004), Cullen (2000). On the whole, despite the importance of the HIV/AIDS subject and its scourge in sub Saharan Africa, the Daily Trust does not give it adequate reporting through lack of illustrations and neglecting the rural areas in terms of reportage. Further, the findings of this study conclude that the press does not support the prescriptions of the Development Media Theory which advocates support for the government's development efforts in fighting the spread of HIV/AIDS. Only 13.1 per cent of HIV/AIDS stories are on advocacy.

The press in Nigeria should emphasize stories on the risks of HIV/AIDS and give more stories and features with Mobilizing Information in order to help the public to translate such

information into meaningful actions on health. Newspaper reporting on HIV/AIDS should also avoid over concentrating on the urban centers, serious effort should be made to reveal the overall comprehensive outlook of the HIV situation down to the grassroots. Newspapers should employ professional health reporters as that will increase frequency of HIV/AIDS features and encourage the newspapers to have editorials with informed opinions and take an official stand over certain issues concerning HIV/AIDS.

References

- Brodie, M., Hamel, E., Brady, L. A., Kates, J., & Altman, D. E. (2004). AIDS at 21: Media coverage of the HIV epidemic 1981-2002. *Columbia Journalism Review*, 42(6), A1.
- Cullen, T. (2000). Repeating mistakes: press coverage of HIV/AIDS in Papua New Guinea and the South Pacific (Doctoral dissertation, University of Queensland).
- Cullen, T. (2006) HIV/AIDS: 25 years of press coverage, *Australian Studies in Journalism*, 12, 64-82.
- Joint United Nations Programme on HIV/AIDS (UNAIDS). (2013). AIDS by the numbers. Geneva: UNAIDS.
- Kasoma, F. (1995). Content analysis of AIDS stories in the Zambian press. *CAEJAC*, 8 (1), 10-30.\
- Komolafe-Opadeji, H. O. (2008). Promoting public awareness of HIV/AIDS in Africa: Follow-up to a pilot study. *Library Philosophy and Practice (e-journal)*, Paper 194. Retrieved May 30, 2014 from <http://digitalcommons.unl.edu/libphilprac/194> , Google Scholar
- Kristiansen, C. and Harding C., (1984), "Mobilization of health behavior by the press in Britain." *Journalism Quarterly* 61 (2): 364-370.
- Lupton, D., Chapman, S., & Wong, W. (1993). Back to complacency: AIDS in the Australian press. *Health Education Research*, 8 (1), 5 -17.
- Lupton, D. (1994). *Moral threats and dangerous desires: AIDS in the news media*. London: Taylor and Francis.
- Mcllwaine, S. (2001). Science and journalism: A Mexican stand-off? *Australian Journalism Review*, 23 (2), 167-188.
- Odorume, O. A. (2015). Mass media health communication: Imperative for sustainable health development in Nigeria Mgbakoigba: *Journal of African Studies*, Volume 4 Ile-Ife : University Ipetumodu
- Nwosu I.E. (1990) (ed): *Mass communication and national development*. Aba: Frontier Publishers Limited

- Osita, N. C. (1993) Press coverage of the Acquired Immunodeficiency Syndrome (AIDS) in Nigeria: A content analytical study. A Master's thesis submitted to the Department of Mass Communication University of Nigeria Nsukka
- Panos Institute (2004). Lessons for today and tomorrow: An analysis of HIV reporting in Southern Africa. Lusaka: Panos Southern Africa
- Piot P. (2005, February 19). Speech to PNG parliamentarians as reported in The National. Page 12 Retrieved 12 February, 2016 from www.thenational.com.pg.
- Pitts, M., & Jackson, H. (1993). Press coverage of AIDS in Zimbabwe: A five year plan. *AIDS Care*, 5 (2), 223-30.
- Ross, M. & J. Carson (1988), "Effectiveness of distribution of information on AIDS: A national study of six media", *New York State Journal of Medicine*, 53 (3): 239-41. Sontag, S. (1989). *AIDS and Its Metaphors*, New York: Anchor
- Global Media Aids Initiative (2015) *The Media and HIV / AIDS : Making a Difference* Geneva: UNAIDS Wilkins, L., & Patterson, P. (1987). Risk analysis and the construction of news. *Journal of communication*, 37(3), 80-92.