



UNIVERSITI PUTRA MALAYSIA

**HIV/AIDS MESSAGE EXPOSURE, KNOWLEDGE, ATTITUDES AND
SAFE PRACTICES AMONG ADOLESCENT ISLAMIYYA GIRLS IN
NORTHEAST NIGERIA**

HAMID ADAMU MUHAMMAD

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By

HAMID ADAMU MUHAMMAD

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

August 2018

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DEDICATION

To my late dad
Hon kadhi Muhammadu MoAllahyidi,
And to my mom
Hajiya Habibah binti Adamu Jambil



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment
of the requirement for the degree of Doctor of Philosophy

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August 2018

Chairman : Professor Ezhar Tamam, PhD
Faculty : Modern Languages and Communication

Exposure to HIV/AIDS messages especially on the mass media among adolescents in sub Saharan Africa has been reported as abysmal in the early 2000s, but now given the growth in infrastructure and development in technology and program appeal, there emerges a need for reassessment. Given that communication particularly through the media is considered a major preventive strategy, this study was set out with the objective of investigating the message exposure, knowledge, attitudes and practices (KAP) on HIV/AIDS of adolescent *Islamiyya* girls as potential mothers in Northeast Nigeria a predominantly Muslim society. Mediating role of HIV/AIDS knowledge and HIV/AIDS attitudes between HIV/AIDS message exposure and HIV/AIDS safe practice, and the moderating role of formal schooling in a structural model were verified. The study also investigated the girl's interpretations of HIV/AIDS messages because generally campaigns over the mass media are susceptible to being misinterpreted by different audiences. This study as well content analyzed the *Daily Trust* newspaper to determine its pattern of the coverage of HIV/AIDS.

Questionnaire survey was administered to 487 respondents selected through multi stage probability sampling, whose data were analyzed by descriptive statistics and PLS Structural Equation Modeling. The qualitative data on the interpretations of the girls' of HIV/AIDS major campaign messages was drawn through focus group discussion with 24 informants among the girls. Focus group discussion is relevant because the informants are being investigated on a focused topic, which is their negotiated meanings of HIV/AIDS campaign messages. Again, all similar studies of message exposure and HIV/AIDS KAP only investigated the extent of message exposure, thereby leaving a big gap on the essence or meaning the audience attach to the

messages. A hundred and seventy HIV/AIDS stories of *Daily Trust* were content analyzed for the period of 3.5 years (1st January 2013-31st June 2016)

The survey found that majority of the respondents reported mass media as their main sources of information on HIV/AIDS. The tested structural model shows while HIV/AIDS message exposure was not a significant predictor of HIV/AIDS safe practice and favorable attitudes, it was a significant predictor of HIV/AIDS knowledge, and HIV/AIDS knowledge was a significant predictor of both HIV/AIDS favorable attitudes and safe practice. HIV/AIDS knowledge was a significant mediator in the model and formal schooling a significant moderator on HIV/AIDS practice. It is concluded that HIV/AIDS message exposure is a necessary but not a sufficient precursor for HIV/AIDS safe practice. It is also revealed that the girls interpreted the HIV/AIDS messages (1) in literal sense, (2) in connotative sense contrived in consonance with Islamic principle, (3) as gender discrimination, (4) as protection, and (5) as legitimization for adultery. Majority of the *Daily Trust*'s HIV/AIDS stories were hard news, mostly dedicated on the theme of care for people living with HIV/AIDS and mostly neglecting rural areas in their coverage. Almost all the stories were buried in inside pages and only. Overall, evidence from this study suggests that the Hierarchy of Effects model fits better within the Media Limited Effects models compared to linear transmission models of behavior change. It is thus concluded that mass media are a necessary but not a sufficient precursor of HIV/AIDS practice, and HIV/AIDS messages are prone to misinterpretations.

Key words: Adolescent Girls; Attitudes; Message Exposure; Northeast Nigeria; HIV/AIDS; Knowledge; Practices

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**PENDEDAHAN MESEJ HIV/AIDS, PENGETAHUAN, SIKAP DAN
AMALAN DALAM KALANGAN REMAJA PEREMPUAN ISLAMIYYA DI
TIMUR LAUT NIGERIA**

Oleh

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Pendedahan mesej mengenai HIV/ AIDS dalam kalangan remaja di sub-Sahara Afrika telah dilaporkan rendah pada awal tahun 2000an. Namun begitu, dengan pertumbuhan infrastruktur dan pembangunan dalam teknologi dan program rayuan, terdapat keperluan untuk penilaian semula. Memandangkan komunikasi terutamanya melalui media dianggap sebagai strategi pencegahan utama, kajian ini mengkaji pendedahan mesej, pengetahuan, sikap dan amalan (KAP) remaja perempuan Islamiyya di Timur Laut Nigeria mengenai HIV / AIDS dimana masyarakat yang kebanyakannya Islam.

Peranan perantaraan pengetahuan HIV/AIDS dan sikap terhadap HIV/AIDS diantara pendedahan mesej dan HIV/AIDS amalan selamat dan peranan pengantaraan persekolahan formal dalam model struktur dikaji. Kajian ini juga akan menelit tafsiran mesej HIV/AIDS dalam kalangan remaja perempuan kerana kempen media massa mudah terdedah kepada salah faham oleh penonton. Kajian ini juga menganalisis kandungan akhbar *Daily Trust* untuk mengenalpasti pola liputan HIV/AIDS.

Borang soal selidik diedarkan kepada 487 responden yang dipilih melalui sampel kebarangkalian pelbagai peringkat. Data dianalisis menggunakan statistik diskriptif dan PLS Model Persamaan Struktur. Data kualitatif mengenai tafsiran mesej kempen utama HIV/AIDS oleh remaja perempuan dikumpul menggunakan kaedah perbincangan secara fokus berkumpulan yang melibatkan 24 orang informan dalam kalangan remaja perempuan. Perbincangan berkumpulan secara fokus sesuai kerana informan ditanyakan topik berfokus iaitu makna yang diketengahkan dalam mesej kempen HIV/AIDS. Sebanyak seratus tujuh puluh berita dari *Daily Trust* telah dianalisis kandungannya bermula dari 1 Januari 2013 hingga 31 Jun, 2016.

Dapatan tinjauan menunjukkan bahawa majoriti responden melaporkan media massa sebagai sumber utama mereka mendapatkan maklumat mengenai HIV/ AIDS. Ujian Model Persamaan Struktur PLS (SEM) menunjukkan bahawa walaupun pendedahan media massa bukan peramal signifikan dalam amalan HIV / AIDS yang selamat dan sikap yang menggalakkan, ia peramal signifikan dalam pengetahuan HIV/AIDS. Pengetahuan HIV/AIDS adalah peramal penting bagi sikap dan amalan yang selamat HIV/AIDS. Pengetahuan HIV/AIDS adalah perantara penting dalam model dan persekolahan formal adalah moderator penting terhadap amalan HIV/AIDS. Oleh itu, dapat disimpulkan bahawa pendedahan media adalah satu keperluan tetapi bukan faktor yang mencukupi untuk amalan yang selamat bagi HIV / AIDS. Dapatan data FGD menunjukkan bahawa remaja perempuan menafsir mesej HIV / AIDS (1) secara literal, (2) dengan maksud konotatif berdasarkan dengan prinsip Islam, (3) sebagai diskriminasi jantina, (4) sebagai perlindungan dan (5) sebagai legitimisasi untuk penzinaan. Penemuan analisis kandungan pula menunjukkan bahawa majoriti daripada berita HIV/AIDS dari akhbar Daily Trust adalah berita keras dimana kebanyakannya menyentuh tema penjagaan orang yang hidup dengan HIV/AIDS dan kebanyakannya mengabaikan kawasan luar bandar dalam liputannya. Secara keseluruhannya, kajian ini menunjukkan bahawa model Hierarki Kesan lebih sesuai dalam model Kesan Media Terbatas berbanding dengan Model Transmisi Perubahan Tingkah Laku Linear bagi merangsangkan perubahan tingkahlaku. Kesimpulannya, media massa adalah keperluan tetapi tidak mencukupi dalam menyampaikan amalan HIV/AIDS yang selamat, dan mesej HIV/AIDS mudah terdedah kepada kesalahtafsiran.

Kata kunci: Remaja Perempuan ; Sikap; Pendedahan Mesej; Timur Laut Nigeria; HIV/AIDS; Pengetahuan; Amalan

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This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

ABC	Abstinence, Be faithful to partner or Condomize
ADICA	Attracting, attention, Creating Desire, removing inhibition, Inspiring Confidence, Impelling Action
AIDAS	Favorable Attention, Interest, Desire, Action, permanent Satisfaction
AIDS	Acquired Immune Deficiency Syndrome
AMOS	Analysis of Moment Structures
ARF	Advertizing Research Foundation
ARRM	AIDS Risk Reduction and Management
AVE	Average Variance Extracted
BRC	Bauchi Radio Corporation
CBSEM	Covariance Based Structural Equation Modeling
CFA	Confirmatory Factor Analysis
CMV	Common Method Variance
CVR	Content Validity Ratio
DNA	Deoxyrybonucleic Acid
EDA	Exploratory Data Analysis
EFA	Exploratory Factor Analysis
EPIA	Exposure to messages, Perception, Integration and Action
FCT	Federal Capital Territory
FGD	Focus Group Discussion
FMoH	Federal Ministry of Health
GoF	Goodness of Fit

H	Hypothesis
HBM	Health Belief Model
HBSC	Health Behavior in School Children
HIV	Human Immunodeficiency Virus
HoE	Hierarchy of Effects
IDP	Internally Displaced Persons
IMB	Information Motivation and Behavior
IO	International Organization
KAB/P	Knowledge, attitude and Behavior/Practice
KAP	Knowledge, Attitude and Practice
MGA	Multi Group Analysis
MSP	Multiple Sex Partners
MTCT	Mother-To-Child-Transmission
NACA	National Action Committee on AIDS
NARHS	National HIV/AIDS Reproductive Health Survey
NASCPA	National AIDS and STDs Control Program
NEALA	National Expert Advisory Committee on AIDS
NGO	Non-Governmental Organization
NNRIMS	Nigerian National Reproductive Information Management Systems
OP-ED	Opinion-Editorial
PBUH	Peace be Upon Him
PCA	Presidential Council on AIDS
PLS	Partial Least Square

PLWH	People Living with HIV/AIDS
RNA	Rybonucleic Acid
RO	Research Objectives
SAW	Salla Allahu Alaihi Wa Sallama (peace be upon him)
SEM	Structural Equation
SES	Socio Economic Status
SFH	Society for Family Health
SPSS	Statistical Package for the Social Sciences
SRBRA	Seen, Remembered, Believed, Read, Acted upon
SSCE	Senior Secondary Certificate Examination
STI	Sexually Transmitted Disease
UAE	United Arab Emirate
UN	United Nations
UNAIDS	Joint United Nations Program on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USA	United States of America
WHO	World Health Organization
YARD	Young Adults Reproductive Health

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The fast spread of the AIDS pandemic has engendered a vigorous debate about the role of media in fighting it. The reasons adduced, so far, are clear; that medical science has been unable to offer anything more than ways or methods of turning it from a deadly into a chronic condition, through the therapies of anti-retroviral. Because these medications are costly and complex, much emphasis and attention had shifted to prevention. This simply translates into encouraging people to change their attitudes towards the syndrome, and behavior in that most intimate area, sex. Therefore, resources have been deployed into public information, everything from billboard campaigns to the transmission of messages about HIV/AIDS in TV programs:

When you are working to combat a disastrous and growing emergency, you should use every tool at your disposal. HIV/AIDS is the worst epidemic humanity has ever faced. It has spread further, faster and with more catastrophic long – term effects than any other disease. Its impact has become a devastating obstacle to development. Broadcast media have tremendous reach and influence, particularly with young people, who represent the future and who are the key to any successful fight against HIV/AIDS. We must seek to engage these powerful [media] organizations as full partners in the fight to halt HIV/AIDS through awareness, prevention and education. (Kofi Annan, former UN Secretary General as cited in UNAIDS, 2004, p. 4)

Substantiating the same position, Hirose, Nakaune, Ishizuka, Tsuchida, and Takanashi, (1998) depicted a correlation between media reportage of HIV/AIDS and public risk perception of the epidemic and safer behavior. As time goes by, the complexity of the challenge raised by AIDS has become much more visible. The epidemic is no longer seen as only a health issue; its ramifications cover all aspects of society from economic, social structures to psychological makeup of communities. The pandemic has come to be recognized as a serious development issue for countries since HIV/AIDS and poverty feed off each other.

In addition, as will be seen later, the social forces driving the HIV/AIDS epidemic are more clearly understood particularly through the gender dimension. Three key factors have been identified as making women or girls more vulnerable to infection: a) the culture of silence surrounding sexuality; b) exploitative transactional and intergenerational sex, and c) violence against women within relationships (Kruger,

2005). The pandemic affects women disproportionately, not just in the prevalence of infection, but also in the impact on those affected.

The media, under normal condition are expected to complement governments' efforts in achieving set objectives on such important issues as combatting HIV/AIDS through the creation of awareness, mobilization and advocacy among other things, such as contained in the cardinal tenets of Development Media Theory. This is more so given that the only remedy for the epidemic is prevention through advocacy on the promotion of safe practices. Mass media play a central role in this direction. Evidence on media reportage of HIV/AIDS in countries with high prevalence rates like Nigeria adds on existing literature on the role of the press, and further guides government policy on HIV/AIDS prevention strategy.

Combating HIV/AIDS is the number sixth item on the list of Millennium Development Goals, which signals its relative importance in the global scheme of things. Studies have passed the stage of conjecture about the epidemic at the turn of this new millennium. And AIDS poses a serious challenge, which can really devastate whole regions and crack decades of national development (Ugande, 2007).

According to the recent figures of prevalence of HIV/AIDS in sub-Saharan Africa, 24.7 million people lived with the syndrome in 2013 with 4.7 adult prevalence, 1.5 million new infections and 1.1 million AIDS related deaths. Nigeria's figures out of these totals stood at 3.2 million people living with it, 220 000 new infections and 210 000 AIDS related deaths. By contrast, a global summary of the epidemic in December 2006 showed 39.5 million people living with HIV, as against the 34.9 million in 2004. The report went further to reflect that the implication of these figures is a total of 4.3 million people were newly infected with HIV in 2006 as against the 3.9 million in 2004; and that a total of 2.9 million deaths due to AIDS was recorded in 2006 against 2.7 million in 2004. In general, estimate by UNAIDS and WHO showed that the epidemic has claimed more than 25 million people since it was first reported in the US in 1981. This startling record makes AIDS about the most destructive epidemic in recorded history. In Nigeria, 3.2 million lived with the HIV with 220 000 new infections in 2013. The country carries 9 percent of the global burden. In addition, available data shows from 2005 to 2013 Nigeria, South Africa and Uganda accounted for almost half of all new infections in sub Saharan Africa. (Joint United Nations Program on HIV/AIDS (UNAIDS), 2013).

Adolescence presents a window of opportunity for introducing policies on media and educational programs and reproductive health services that could change the course of the HIV/AIDS epidemic in sub-Saharan Africa. Curbing the HIV epidemic by focusing on the needs of adolescents becomes an urgent priority. Young people and their future contributions to the society are crucial to the survival and wellbeing of the entire region of sub-Saharan Africa Against this background, World Health Organization (cited in Bankole, Singh, Woog and Wulf, (2004: 5) points out, "[d]uring early adolescence, HIV rates are the lowest of any period during the life circle. The

challenge is to keep them this way. Focusing on young people is likely to be the most effective approach to confronting the epidemic, particularly in high prevalence countries”.

Extensive surveys have shown that adolescents are at greater risk of acquiring HIV than adults. For example, Bankole et al. (2004) stated that behavioral, psychological and socio cultural factors make young people more vulnerable to HIV infection. Adolescence is a time when young people naturally explore and take risks in many aspects of their lives, including sexual relationship. For example, those who have sexual experience may change partners frequently or desire to have many partners at the same period or carelessly engage in unprotected sex. Young people’s chance or risk of contracting HIV is heightened by their behavior. Marriage is also another factor, which increases adolescent girl’s risk of contracting HIV in sub-Saharan Africa (UNFPA, 2003). In part, this according to the survey is because many adolescent women are married to men who are considerably older. Some of these older husbands have likely had several sex partners before, thereby likely having sexually transmitted infections (STI), including HIV, which they may transmit to their young wives. Further, young women are physiologically more vulnerable to infection than older women are because changes in the reproductive tract during puberty make the vagina and cervix of adolescents less resistant to infection (Bolan, Ehrhardt & Wessershagen, 1999).

Studies have also shown that Muslim communities and countries like Niger, Nigeria, Pakistan and Senegal, which were considered hitherto as less prone to HIV risk, are now witnessing a rapid evidence of an advancing HIV/AIDS epidemic, because of peculiar cultural and social practices (Niaz, 2002, Memoona, 2005). There was a rising prevalence of HIV/AIDS in northeastern Nigeria, which was closely monitored by rapid epidemiological surveys according to Garbati, Abba, Kabrang and Yusuph (2012). Northeastern Nigeria being a Muslim dominated society; the non-secular *Islamiyya* school system, due to religious considerations, happens to be more robust a system that captures the adolescent girls, whose enrolment into formal schools is still a challenge in the region. According to UNICEF Information Sheet on Girls’ Education in Nigeria (2007), the ratio of girl to boy enrolment is 1 to 2 or 3 in Northern Nigeria. The barriers to girl-child enrolment according to the report ranged from poverty, early marriage, religious and cultural misinterpretation to teenage pregnancy. Mostly girls hawk wares in the streets because of poverty, instead of going to school. The *Islamiyya* school system, though more comprehensive in terms of covering the adolescent girls, to date no study used the system to investigate vital media-related social issues or health-related issues like the HIV/AIDS or any other social science subject.

For media strategies to be effective, they have to be society and location specific. The international conventional campaign packages may not be relevant to some locations or some situations. For example, the slogan that it is safe to wear condom and commit sexual intercourse may not go well with *Islamiyya* dominated Muslim communities of

northeastern Nigeria. The *Islamiyya* teaches the moral that extra-marital sex is an abomination in the first place, which renders the necessity of wearing condom out of place.

Kadiri, Ahmad and Mustaffa (2014), in a study of cultural sensitivity in STIs campaign in Western Nigeria, categorically recommended for studies to be conducted in other parts of Nigeria to bring evidence on peculiar cultural interpretations, which could be conceptualized into meaningful HIV/AIDS or other STIs media campaigns in Nigeria. A similar study was conducted by Kaugama (2009) in Jigawa to supply evidence from northwest Nigeria, so also is the study by Okwori, Nwadioha, Akogwa, Agbo, Ekoja and Adole (2012) in Benue highlighting the situation in North Central Nigeria. Such evidence concerning young persons appears to be lacking from Northeast Nigeria, which forms the fulcrum of this study. The fact that northeastern Nigeria is a Muslim society, all *Islamiyya* girls are potential mothers of tomorrow, because marriage is a binding institution. Any meaningful HIV/AIDS message which has impacted on them goes a long way in impacting on children yet unborn because of change of attitude.

While there exist many models of investigating community health issues, the cognitive, affective and behavioral approach (KAP model) seemed more attractive to researchers because of its ability to reveal plausible pathways to addressing health concerns especially by identifying misconceptions about diseases and affective barriers or obstacles to prevention or protection. Buttressing this point, Bhattacharyya (1997) and Stone and Campbell (1984) (cited in Launiala, 2009) stated that the hallmark of KAP survey model lies in its characteristic of apt presentation of results, generalizability of results from small sample to wider population, ease of design, administration and results interpretation. Even though it is very dangerous to assume linear progression from knowledge to favorable attitude and ultimately to safe practice, the KAP model presumes that decisions on behavior change has cognitive and psychological dimensions

1.2 Statement of the Research Problem

Further to the assertion by Kofi Anan (in UNAIDS 2005) referenced at the introduction of this thesis it follows that lack of medically established cure or vaccination for HIV/AIDS must be remedied by preventive messaging, through any of the interpersonal or mass communication channels. Again, not only the messaging, people, particularly adolescents have to have adequate message exposure in order to reverse the spread of the HIV/AIDS syndrome. Regrettably however, lamenting inadequacy of HIV/AIDS message exposure in sub-Saharan Africa, Kruger (2005) blamed the vulnerable of women or girls to infection in the region on three key factors: a) the culture of silence surrounding sexuality; b) exploitative transactional and intergenerational sex, and c) violence against women within relationships. Earlier studies like Li et al. (2009) observed a symbiotic relationship between the two major communication channel types, mass media and interpersonal channels, in fighting HIV/AIDS. The authors observed that increase in media message exposure has the

likelihood of increasing interpersonal channel communications and message exposure about HIV/AIDS. In India for example, Chatterjee (1999) reported that exposure to HIV/AIDS message exposure through mass media has the high likelihood to increase HIV/AIDS related discussion among the public. Despite the penetration and the effectiveness of comprehensive studies on general HIV/AIDS message exposure in dealing with attitude and behavior change, in sub-Saharan Africa, there is paucity of them. A comprehensive study that takes the of HIV/AIDS message exposure would provide an insight into what the public consider as their major sources of information on HIV/AIDS thereby giving a clue to stakeholders as to how to effectively utilize the channels for optimal effectiveness.

Major surveys on HIV/AIDS prevalence and young persons' behavioral patterns in Africa in recent years point that attempts on behavior change communication interventions do not actually reap considerable impacts in cultivating desired sexual behavior response among the young. This is despite hikes in the levels of awareness (Mulwo, 2008). As far back as the late 80s, Greig and Rapheal (1989) reported that young persons have been identified as resistant to messages on health promotion and as a result, they yielded slowly to adopting healthy lifestyle behaviors.

Again, the gender dimension to the HIV/AIDS subject in Africa south of Sahara was extensively discussed in HIV/AIDS spread literature. Harrison (2005) and UNAIDS (2006) reported that because of cultural factors, as compared to men, the prevalence of HIV among women is higher in Africa. Similarly, according to Hoosen and Collins (2004), women are more at risk in Africa possibly because of culturally and socially ascribed roles conferred on them, which gave them disadvantaged position with regard to decision making on safe sex; for example in negotiating the use of condom during sex. Because in such cultures, they are socially constructed as passive, submissive or subordinate. Other drivers of the HIV/AIDS epidemic among women according to Mulwo (2008), is the misconception which encouraged widespread rape, that young girls are free from HIV coupled with the long standing myth that having sex with them could possibly cleanse a man's bad blood of HIV. These realities make young women targets of constant monitor in HIV/AIDS communication research since media communications are the dominant identified prevention as highlighted in the introduction of this work.

In the early 2000s, Bankole et al. (2004), assessing adolescents' media exposure and HIV/AIDS situation in sub-Saharan Africa, reported that in most countries fewer than one in ten women and men aged 15 -19 listen to radio, watch TV and or read a newspaper at least once a week. More horrendous, in many countries according to the report, large proportions have no weekly exposure to any mass media. Now in 2017, given improvements and development in infrastructure and increased literacy and program appeal, and the popularity of Hausa home video particularly in Northern Nigeria (Larkin, 2004), there appears an emergent need for the reassessment of adolescents' media exposure in relation to HIV/AIDS. In addition, recounting the limitations of their similar extensive study on media exposure, knowledge, attitude

and practice on HIV/AIDS in China, Xiao, Li, Lin and Tam (2015) reported lack of content analyzing media output to determine the patterns of media messages on HIV/AIDS as a major limitation of their study. The authors accordingly suggested complementing HIV/AIDS message exposure and KAP studies with content analysis of the patterns of media coverage of HIV/AIDS. Xiao et al. (ibid) stated, “this study (KAP) did not provide information about the nature and contents of the HIV/AIDS prevention information from these media ... content analysis studies are needed in the future to find out what kinds of such information are available through Chinese mass media sources”(pp. 10-11). And in studying media coverage of HIV/AIDS, most of them content analyzed newspapers compared to other media. This is because access to archival print resources was easier and more effective than that of broadcast records or transcripts trawling through which is arduous, and sometimes they are not readily available. 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, 2011). Against this backdrop, this study content analyzed *Daily Trust* which is the only newspaper in Northern Nigerian which has been consistent for over 20 years.

In an assessment since the early 2000s of Nigerian mass media, Oyediran (2003) reported that the evidence that was found on the effectiveness of HIV/AIDS and other STIs prevention messages on the mass media in Nigeria has been adjudged to be weak. Moreover, this accordingly is particular to campaigns targeting adolescents or young people generally. For the late 2000s, after content analyzing 6 Nigerian newspapers, Anim (2011) concluded that between 2005 and 2010, there was a massive decline in HIV/AIDS coverage by about 94%. This situation depicted an unacceptably waning interest of the press in covering the epidemic and in turn a devaluing of its severity, therefore consigning it to low priorities. These submissions particularly call for a continuing effort to track the pattern of coverage by the press of the epidemic beyond 2010, as global targets are now being set to wipe the epidemic by the year 2030.

Media campaigns about HIV/AIDS encouraging the option of using condom as an alternative to abstinence seemed opposed to the stern warning of the Holy Qur'an against fornication or adultery through whatever way (applying condom or not): “And come not near to unlawful sex. Verily it is... a great sin and an evil way (that leads to hell)” Qur'an 17:32 (Khān, 1977). Because of the strictness of Islam on illegitimate sex, these campaign messages seem less likely to gain acceptance or even motivate the *Islamiyya* girls (girls who attend non-formal or non-secular Islamic night schools) to translate the messages into meaningful health actions. Therefore of interest to prevention intervention messages is a searchlight on the interpretations of the adolescent girls of such messages. There must be an attempt to interpret the general concept of ‘safe sex’ from the girl’s own viewpoints.

In addition, HIV/AIDS messages are adjudged as potent tool for HIV/AIDS awareness and increasing protective and preventive behavior; but ‘message exposure on HIV/AIDS’ as a major independent variable interacting with other KAP variables

appears to be conspicuously missing in all HIV/AIDS KAP studies in West Africa, which is a potent conceptual and methodological gap. Li, Wu, Lin, Guan, Rotheram-Borus and Lu (2009) and Bekalu and Eggrmont (2013) and similar other studies e.g. Moore (2008); Letamo (2011) and Aung, et al. (2013) suggested there seems to be a correlation among the HIV/AIDS KAP variables and that respondents' major sources of information are the mass media. However, there appears to be no study that went ahead of the direct effects, to predicting specific roles like that of possible mediation of HIV/AIDS knowledge and safe attitude between HIV/AIDS message exposure and HIV/AIDS safe practice. Separating different roles for the constructs of HIV/AIDS KAP and message exposure in a mediation model could give a further clarification to the subject.

Furthermore, Bankole et al. (2004) suggested a close link between education or formal schooling and young persons' ability to protect themselves or avoid HIV/AIDS through safe practice and other preventive behavior. Specifically, Bankole et al. observed that the spread of HIV/AIDS reduced among young women (15-19 year old) with some level of schooling, while at the same time the situation among young women of the same age with no schooling remained unchanged in Zambia. Clearly Bankole et al.'s (2004) finding indirectly suggested that in a hypothesized model, formal schooling could moderate the assumed effect between HIV/AIDS message exposure and other KAP variables; yet there seems to be no study that attempted to establish such clarification. Overall, the gamut of issues raised in this section request answers to such questions as what the current patterns of HIV/AIDS message exposure among the *Islamiyya* girls are; what their knowledge, attitude and practice (KAP) statuses are on HIV/AIDS; what their interpretations of HIV/AIDS mass media messages are, and what the patterns of press coverage of HIV/AIDS are in Northeast Nigeria.

1.3 Aim and Objectives of the Research

The general aim of this study is to investigate the patterns of *Islamiyya* girls' message exposure and specifically message exposure on HIV/AIDS, and determine their levels of knowledge, attitude and practice (KAP) on HIV/AIDS. Seven specific objectives are addressed through mixed method approach: The Survey addresses Research Objective 1 to 5; FGD addresses Research Objective 6, and content analysis responds to Research Objective 7.

The specific objectives of the study are to:

- (RO 1) Identify the *Islamiyya* girls' major sources of information on HIV/AIDS and determine their patterns of general media consumption habit.
- (RO 2) Assess their message exposure on HIV/AIDS and their knowledge, attitude and practice/behavior (KAP) levels on the syndrome.

- (RO 3) Test hypothesized relationships among HIV/AIDS message exposure and HIV/AIDS knowledge, HIV/AIDS favorable attitude and HIV/AIDS safe practice among the girls.
- (RO 4a) Verify the mediating role of HIV/AIDS knowledge and that of HIV/AIDS favorable attitude between HIV/AIDS message exposure and HIV/AIDS safe practice; and
 - (4b) Verify the mediating role of HIV/AIDS knowledge between HIV/AIDS message exposure and HIV/AIDS favorable attitude.
- (RO 5) Ascertain the moderating role of formal schooling on the effect of HIV/AIDS message exposure on HIV/AIDS safe practice, HIV/AIDS knowledge and HIV/AIDS favorable attitude.

The specific objective of the FGD is to:

- (RO 6) Determine how the girls interpret major media campaign messages on HIV/AIDS.
- (RO 7) To determine the patterns of coverage of HIV/AIDS in *Daily Trust* newspaper.

1.4 Significance of the Study

1.4.1 Theoretical

This study envisions bridging the literature gap in studies of different people and their HIV/AIDS message exposure and KAP statuses on HIV/AIDS epidemic by providing an evidence based information on Northeast Nigeria in terms of theory. This is to further substantiate or explore mediation and moderation relationships among the main variables of the Advertising Foundation's version of the Hierarchy of Effects (HoE) model on this study's population on media and HIV/AIDS KAP, envisaged by Hannan (2009). Further, this study extends and explores the postulations of HIV/AIDS health priority agenda setting in Nigerian newspaper environment and hypothesized relationships in the emphasis of key newspaper content variables to explore an extension or a further dimension of Agenda setting theory in HIV/AIDS health priority in Nigeria.

1.4.2 Practical

Evidence provided by this study hopes to guide media campaign strategies on HIV/AIDS in terms of the consideration of how AIDS campaign messages are interpreted by the epicenter of HIV/AIDS, the adolescent girls and other cultural and religious sensitivities of theirs in northeastern Nigeria, thereby avoiding incongruous messages and targeting specific HIV risky practices among adolescent girls. Overall, evidence provided by this study is expected to guide the conceptualization and

production of HIV/AIDS programs as recommended by Kadiri et al. (2014; 2017), Mulwo (2008), Airhehenbua and Obregon (2000), etc.

1.4.3 Methodological

Though Bouanchaud (2011) criticized the analysis of media exposure and KAP on HIV/AIDS using classical theory of sum score and recommended dealing with the constructs as reflective latent constructs, yet to date this researcher is aware of no study that attempted such methodological possibilities especially in Africa. This study provides a methodological model in dealing with the subject in a regression based PLS (SEM) model, filtering distinct roles for the different KAP variables in a mediation and moderation model. The study also develops a scale for HIV/AIDS safe behavior/practice, which can conveniently be applied in similar Muslim dominated societies of Africa, which share common traditional and cultural characteristics with Northern Nigeria.

Other message exposure and KAP on HIV/AIDS studies ordinarily assumed that the construct 'message exposure' is taken for granted as inherently understood. Nonetheless, the reality is, the essence of HIV/AIDS message exposure cannot be understood by just revealing habits of media consumption without an insight into the meaning or interpretation audience make of the HIV/AIDS messages, and how the media cover the messages. Through a combination of methods, this study renders a comprehensive mixed methodology on dealing with the subject.

1.4.4 Policy

The last time Nigeria reviewed policy in behavior change communication on HIV/AIDS prevention was in 2004 with an orchestrated plan in which communication was a top priority (the HIV/AIDS National Strategic Framework for Action, 2005 – 2009).

This study targets to supply empirical evidence that will trigger implications for policy review in terms of media campaign messaging and the kinds of mass media better suited for HIV/AIDS messaging, for example, the Hausa Home Video.

1.5 Scope of the Study

This study takes place in the *Islamiyya* school system in the wider population of Northeast Nigeria and the target population of Bauchi on adolescent girls aged 11 to 20 of the *Islamiyya* night schools under the coordination of the umbrella body of *Riyala*, and because of cultural and religious homogeneity, results can be generalized for the entire Northeast Nigeria. The study investigates their *message exposure, knowledge attitudes and practice on HIV/AIDS*. Furthermore, the study also explored

insights into the respondents' interpretations of dominant media campaign messages on HIV/AIDS. Finally, the study investigated qualitatively the range of the interpretations of the *Islamiyya* girls of HIV/AIDS messages. The study also assessed the patterns of coverage of HIV/AIDS issues by the *Daily Trust* newspaper published in Nigeria across the last three years (January, 2013- June, 2016). The whole study was conducted in the last quarter of 2016 and early 2017.

1.6 HIV/AIDS Situation in Nigeria

Five years after it was reported in the USA in 1981, AIDS reached Nigeria. Akuto (1994) and Easnest (1997) cited in Ugande (2007) have reported that the first case was diagnosed and reported in 1986 in a “sexually active 13 years old girl” in Lagos. Since then, the number of people living with AIDS grew. Figures on the growth rate of the epidemic rose from 1.8% in 2003 to 3.8% in 1994 to 4.5% in 1996, 5.4% in 1999, 5.8 in 2001 and dipped for the first time in 2003 and 4.4 in 2005 (Ikyanum & Iorkua, 2005). In addition, according to National HIV & AIDS Behavior Change Communication 5 year Strategy 2004 – 2008, in Nigeria, the epidemic has different faces across the states.

Report of periodic national surveys among anti-natal clinic attenders showed a trend of rapid prevalence in the adult HIV sero-prevalence rate from 1.8% in 1991, 4.5% in 1996 to 5.8 in 2001. The rate however seemed to reverse in 2003 with 5.0% increase rate (Federal Ministry of Health, 2005). The results of national surveys have today proved that no part of Nigeria was spared from the scourge of HIV and AIDS. All the states in Nigeria have a prevalence rate of more than 1%. HIV/AIDS disease has broken the bounds of being identified with groups commonly classified as high – risk groups, and it is now common in the general population (ibid). Also, the prevalence of the HIV/AIDS epidemic has partially accounted for the gradual declining of life expectancy in the country in recent times (53.2 years in 1991 to 43.9 years in recent years) (UNFPA, 2004).

Narrowing down to Bauchi, which is the largest state of northeastern Nigeria, and the specific location, there is evidence of rapid prevalence of HIV/AIDS, even though there is no consistent yearly data of new infections. The HIV/AIDS population in Bauchi is 59,052 (1.92 of the National figure: 3,083,000) as at 2007, (Annual Abstract of Statistics, 2008). Moreover, in 2005 the number of reported cases of HIV in the state was 43 (20 males, 23 females), but the figure multiplied to 141 in 2006 (62 males, 79 females), (Bauchi State Statistical Year book 2006). Because of the growing emergency of the epidemic, there were various responses particularly by government since 1987:

There was NEACA (National Expert Advisory Committee) in 1987, then NASCP (National AIDS and STDS Control Program) in 1988, which developed key guidelines on interventions and monitoring of the epidemic. There were also recommendations

on how best to combat the disease, which ultimately culminated into the establishment of the presidential council on AIDS (PCA) along with National Action Committee on AIDS (NACA). Since AIDS has no known cure, scholars and experts observed that the best strategy of stemming the escalation of the epidemic is communication for behavior change. Along this line therefore, and as part of renewed efforts, the country launched a revised HIV/AIDS policy and a five-year (2004 – 2008) National HIV and AIDS Behavior Change Communication Strategy respectively. Back, Nigeria had also launched Nigeria National Response Information Management System (NNRIMS) for HIV/AIDS (Federal Ministry of Health, 2005). The most recent orchestrated plan in which communication is a top priority is the HIV/AIDS National Strategic Framework for Action (2005 – 2009).

1.7 Gender and Cultural Perspectives of HIV/AIDS in sub Saharan Africa

The gender aspect of the HIV/AIDS drivers in Africa sub Sahara was discussed in HIV/AIDS literature of HIV spread. UNAIDS (2006) and Harrison (2005) reported that because of cultural factors, as compared to men, the prevalence of HIV among women is higher in Africa. Similarly, according to Hoosen and Collins (2004), women are more at risk in Africa possibly because of culturally and socially ascribed roles conferred on them, which gave them disadvantaged position with regard to decision making on safe sex; for example in negotiating the use of condom during sex. Because in such cultures, they are socially constructed as passive, submissive or subordinate. Other drivers of the HIV/AIDS epidemic among women, according to Mulwo (2008), is the misconception which encouraged widespread rape, that young girls are free from HIV, coupled with the long standing myth that having sex with them could possibly cleanse a man's bad blood of HIV. For instance, discussing the culturally sanctioned subordination of young girls and women in sub-Saharan Africa, Bankole, Singh, Woog, and Wulf (2004) stated,

his is particularly true for young women, who may submit to men's sexual demands because they fear being beaten or they are at a subordinate position and have no alternative. Women with little power may not be able to refuse sex or to ask their partners to use condom even when they know they risk getting pregnant or contracting an STI, including HIV/AIDS... (p. 9)

Marriage is also another factor, which increases adolescent girl's risk of contracting HIV in sub-Saharan Africa (UNFPA, 2003). In part, this according to the survey is because many adolescent women are married to men who are considerably older. Some of these older husbands have likely had several sex partners before, thereby likely having sexually transmitted infections (STI), including HIV, which they may transmit to their young wives.

Socio cultural practices that introduce or encourage sexual relationships involving young people such as child marriage and rituals initiating boys into adulthood are still common in Nigeria. Some of these cultural practices as studies have shown include traditional gender stereotyping, early marriage for women and sugar daddies (Bankole et al., 2004). Generally in West Africa men are considered to be strong providers, protectors and authority figures while women primarily wives and mothers, whose role is mainly to grow and prepare food for the family, this particular character of the West African society has induced a situation in which men are condoned for having multiple sex partners after marriage while women are expected to abstain from sex until marriage and to be faithful to their husbands once married. This situation is even further exacerbated by cases in which young women submit to men's sexual demands because of fear of being beaten or are in a subordinate position and have no alternative. Because of all these traditional and cultural conditions women have little power, and therefore may not be able to refuse sex or, in the case of non-Muslims, ask their partners to use condoms even if they are very much aware of the risk of getting pregnant or contracting an STI, including HIV. In Uganda for example, one in four women and men believe that married women can not refuse sex, even when she knows her partner has HIV (Bankole et al. 2004).

Narrowing to northern Nigeria, some HIV/AIDS risky practices associated with culture and religion are manifold. Because of discipline in Islamic teaching the girls received by avoiding dressing sexually provocatively. It is however observable and reported that those of them who do not attend formal secular schools in the day time use their time hawking on the streets and parks, which is a high risk behavior. While some of them conveniently seize the opportunity of *Tahajjud* (late night prayers of the last ten days of Ramadan fasting) to make appointments with their boyfriends and indulge in immoral activities, most often indiscriminately because it is culturally condoned for girls to have multiple boyfriends. Another high risk behavior observable among them is night courtship, which provides a clandestine opportunity for most of them to engage in illicit sex. And most importantly, they also leave their parents houses for one or two days as bride's friends, in most cases engaging in immoral activities with groom's friends.

1.8 Definition of Key Words

The key word in this study are hereunder conceptually and operationally clarified:

Message exposure: This is conceptually defined as the extent to which members of audience have encountered specific messages or media content (Slater, 2004) or other interpersonal channels. Operationally, it refers to the aggregate of a respondent's responses to 11 questions on the extent of their encounter with radio, TV, newspaper, home video Hausa novel and other interpersonal channels like friends and teachers on 5-point scale responses.

Message exposure on HIV/AIDS: Conceptually, this refers to the extent the respondents obtain HIV/AIDS related messages from mass media or other interpersonal channels. In this study the concept is measure by the composite score of a respondents responses to 11 questions on HIV/AIDS message exposure. In this study mass media refer to legacy or traditional mass communication channels excluding new media.

HIV knowledge: This concept refers to the respondent's knowledge of prevention, risk behavior, HIV basic facts, HIV testing, transmission and epidemiology (Garbati et al., 2011). The level of HIV/AIDS knowledge is measured based on the composite scores of correct responses on 29 HIV/AIDS knowledge questionnaire items.

Attitude towards HIV/AIDS: This refers to mental state of readiness in a respondent, which helps prevent the transmission of HIV/AIDS and STDs among inhabitants of a community, including tolerance for people with AIDS (Lal, Vasan, Sarma, & Thankappan, 2000). This is measured by the aggregate of a respondent's responses to 5-point 12 scale items on attitudes towards HIV/AIDS syndrome and people living with it.

HIV/AIDS safe practice: This construct refers to the behavior that reduces the respondents' risk or chance of contracting HIV/AIDS- including intention to practice. This is measured by the aggregate of a respondent's responses to a 5-point scale responses to 17 items on HIV/AIDS safe practice.

Interpretations of the HIV/AIDS messages: These are the respondents' views and understandings of HIV/AIDS message whether correct or incorrect.

Adolescent Islamiyya girls: These are 11 to 20 year old girls in Nigeria enrolled in and attending Islamic community night schools.

Press coverage of HIV/AIDS: This refers to the extent and prominence of coverage of HIV/AIDS issues by the *Daily Trust*.

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BIODATA OF STUDENT

The student is of Hausa/Fulani ethnic group and grew up in Bauchi, Gombe and Borno states of Northeast Nigeria, and was widely travelled across all the six states of Northeast Nigeria. He is a moderate Muslim, neither belonging to the *Tariqa* nor *Izala* sects (major Muslim sects in Nigeria). Having grown in a typical Muslim cleric family, he was exposed to and taught major textbooks of *Maliki* jurisprudence. He taught briefly in the late 90s in the *Islamiyya* system before acquiring Islamic University of Madina, Saudi Arabia's certificate in Islamic jurisprudence and later on worked with the Muslim Students' Society of Nigeria. Being a member of Zungur district traditional arrangement, the researcher participated in numerous local traditional events involving the installation of the district head, other traditional title holders and other cultural and religious functions. Trained in mass communication at the University of Maiduguri, Bayero University Kano and University Putra Malaysia, the researcher had some experience of both national and international interactions with colleagues and scholars in the discipline. The combination of backgrounds highlighted above might influence or shape the way the researcher as the instrument of data collection made the double hermeneutics or made sense of the qualitative data gathered generally.

LIST OF PUBLICATIONS

- 1) The Mediation of HIV/AIDS Knowledge in the Effect of Media Exposure on Attitude and Practice on the Syndrome: A Cross Sectional Study of Adolescent Islamiyya Girls in North- east Nigeria
**Journal of Social Science and Humanities* (JSSH) Vol. 26 (3) Sept. 2018
- 2) Press Coverage og HIV/AIDS in Northern Nigeria: A Study of *Daily Tru*
**Human Communication* Vol.1(1)
- 3) Relationships between Media Exposure and Knowledge, Attitude and Practice on HIV/AIDS: A Cross Sectional Survey of Adolescent *Islamiyya* Girls in Nigeria
*Under Review, *Health communication*
- 4) Assessing the moderating role of secular schooling in a structural model of media exposure and knowledge attitude and practice on HIV/AIDS using multi group PLS SEM analysis
* Submitted to *Journal Health Communication*



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