

Original Research Article

Using Drama for Investment and Management of HIV and AIDS Risk Reduction Practices in Selected Universities in Abia State: A Controlled Study

E. E. Enwereji¹, E I. Akubugwo², J. O. Onwuka², D. C. Chikezie², R.O. Eze²,
V.O. Nwaugo²

¹Principal Investigator, ²Co-Investigator,
Abia State University, Uturu, Abia State, Nigeria

Corresponding Author: E. E. Enwereji

ABSTRACT

Introduction: Studies have shown that performing on stage allows individuals to use rational and holistic approaches to suggest solutions to problems. Following this, using drama as an intervention strategy could result to internalizing both the emotional and cognitive dimensions of a problem to produce positive changes. This study used drama to create awareness on HIV and AIDS risk reduction practices among university students.

Materials and methods: First year students in three universities, Federal, State and Private Universities were used for the study. It was assumed that using drama as a form of intervention for the first year students will create awareness on the likelihood of sexual overtures in tertiary institutions.

A random sample of ninety ((90) students made up of 30 students from each of the three universities studied was used. The completed copies of self-administered pre- and post drama questionnaire were collected and analyzed qualitatively and quantitatively using Tables and percentages.

Results: Results showed that 27 (90%) of students in Michael Okpara University of Agriculture (MOUA), 28 (98%) in Abia State University (ABSU) and 28(93%) in Rhema University were aware that HIV is a virus infection. Also a good number of students 29 (97%) in MOUA, 28(93%) in ABSU and 27(90%) in Rhema viewed sharing sharp objects like razor blades and syringes as risk factor for HIV infection.

Knowledge on meaning of unprotected sex, showed that 25 (83%) of students in MOUA, 22 (73%) in ABSU, and 23 (77%) in Rhema viewed unprotected sex as having sex without condom.

Conclusion: Based on result of the study, drama is a valuable and timely intervention strategy that is capable of encouraging HIV risk reduction among university students.

Key words: drama, intervention, HIV risk reduction, condom

INTRODUCTION

Drama and role-playing methods are commonly used in promoting health programmes including prevention of HIV and AIDS in secondary schools, but evidence of their use in tertiary institutions is limited. Many reasons contribute to their limited use for HIV and AIDS prevention in tertiary institutions. Among the reasons is

that using quantitative methods drama produces alone unlike what obtains in secondary schools seem not perfectly suited for evaluating changes drama produces among youths in higher institutions. The need to include both emotional experiences and cognitive achievements during HIV and AIDS prevention for youths in higher

institutions should not be underestimated. [1-5]

According to studies, drama encourages growth as well as emotional and learning experiences that foster knowledge. [6-12] Drama identifies behaviours needed to understand the methods of modifying attitudes for positive changes. Using drama in HIV and AIDS prevention enables individuals to learn by observing and receiving feedback from others. [13-18]

Drama emphasizes learning where audiences produce significant improvements. [19-25] Using drama for HIV and AIDS prevention could reduce the risk of sexually transmitted infections by over 90%. [26-29] Drama produces dramatic experiences that allow individuals the freedom of choice to understand the salient meanings of the problem under investigation. [30-34]

Sexually active adolescents in developing countries including Nigeria, are at risk of contracting sexually transmitted infections (STIs). [35-37] New intakes in high institutions are prone to multiple sex partners as a result of the older students rushing to engage them as girl and boy friends. Most times, people living with HIV believe that, since they are already infected, there may not be need to practice safer sex with other HIV-positive partners. They therefore indulge in unprotected sex which could put them at risk of being infected with other STIs besides HIV. The same is applicable to “magnetic couples” or “sero-discordant” (those in which one partner is HIV-positive and the other HIV-negative). [38,39] But scientists are of the view that one could be infected with a different strain of the virus in addition to the initial infection which would cause *resistance* to medications, thereby render HIV treatment more difficult. [40]

In this circumstance, drama could be used to influence positive attitudes on safer sexual practices as well as create HIV and AIDS awareness among tertiary students. This study used drama as a medium for communicating HIV and AIDS risk

reduction behaviours among youths in tertiary institutions.

MATERIALS AND METHODS

Study area:

The study area is Abia State in South East Nigeria. Abia State is made up of 17 local government areas. It has a population of 2.7million (2006 Nigerian census report). There are 9 tertiary institutions comprising 3 universities (Federal, State and Private universities), 2 polytechnics, 2 teacher training institutes and 2 schools of health. All the universities in the State, Michael Okpara University of Agriculture (MOUA), representing Federal university, Abia State university, representing State university, and Rhema University, representing private university were used for the study.

Abia State has 3 commercial cities Aba, Umuahia and Arochuku. These cities are densely populated. Inhabitants of Abia State are made up of artisans, traders, farmers, civil and public servants. Individuals in Abia State receive health care services from a teaching hospital, four general hospitals and seven primary health care centres.

Ethical consideration:

Ethical Review Committees of the Abia State University approved the project before the commencement of the study. After the approval from the ethical committee, informed consents were sought and obtained from the Deans of Students' Affairs of the three universities studied. Informed consents were also obtained from students in the three universities included in the study.

Design

The study was for three months August-October 2016. A cross-sectional observational research design was used. Three universities, one private, one State and the other Federal were studied. The three universities are Michael Okpara University of Agriculture (MOUA), representing federal university, Abia State University (ABSU), representing state university, and Rhema University,

representing private university. All the three universities received intervention in the form of drama in their respective campuses and the drama lasted for three weeks. The duration for each episode was an hour. The drama was provided by a Consultant. The Consultant and his group presented drama programme that adopted allegory to give symbolic narrative of what happens to new students in the universities. The symbolic narrative helped to create awareness on the necessity of avoiding HIV risk behaviours in the universities. The drama as presented also initiated catharsis. Catharsis created pity and fear that motivated the students to avoid taking the risk of penetrative sex.

A pretest to perfect the drama was conducted. Before the drama was presented, self-administered pre-intervention questionnaire was distributed to the respondents by the researchers. This was to assess the knowledge base of the students. Thereafter, the drama intervention was provided to the students in their respective university campuses. This guaranteed that the students in each of the campuses of the university received process drama where imaginary world was used to highlight effects of taking sexual risks among students. At the end of the intervention, self-administered post-intervention questionnaire was also distributed by the researchers. This helped to evaluate the extent to which the drama used created awareness on HIV and AIDS risk-reduction practices.

In this study, drama was used as a means of promoting change that served cathartic and performative roles. In the cathartic role, actors produced drama on the problems under study and allowed the students to identify with the characters in the drama so as to enable them act as change agents. For the performative role, the students mimicked the actors and used the drama techniques to portray life experiences in the campuses.

Ninety (90) students, comprising 30 students from each of the universities were used for the study. The students were selected by quota and simple random

sampling with replacement. The pre-intervention and post-intervention responses were analysed both quantitatively and qualitatively using Tables and percentages.

RESULT

Demographic characteristics of the respondents:

Table 1 contains the demographic characteristics of the students

Table 1: demographic characteristics of the respondents

characteristics	MOUA	ABSU	Rhema	Total
sex				
female	11(37%)	23(77%)	25(83%)	59(66%)
male	19(63%)	7(23%)	5(17%)	31(34%)
Total	30(100%)	30(100%)	30(100%)	90(100%)
Age range				
< 20 years	5(17%)	15(50%)	21(70%)	41(46%)
20-25 years	21(70%)	15(50%)	9(30%)	45(50%)
26-30 years	3(10%)	0%	0%	3(3%)
31-35 years	0%	0%	0%	0%
36 years and above	1(3%)	0%	0%	1(1%)
Total	30(100%)	30(100%)	30(100%)	90(100%)
Marital status				
single	30(100%)	27(90%)	28(93%)	85(95%)
married	0%	2(7%)	0%	2(2%)
separated	0%	1(3%)	2(7%)	3(3%)
divorced	0%	0%	0%	0%
Total	30(100%)	30(100%)	30(100%)	90(100%)

From the Table, Rhema and ABSU as private and State universities respectively had more female students than MOUA which is a federal university. Also students in MOUA were older than those in ABSU and Rhema. However, students in Rhema University were younger in age than those in MOUA and ABSU respectively. On the whole, 31(34%) males and 59(66%) females between the ages of 20-35years were studied in the three universities chosen. Majority of the students studied were single except in ABSU where 2(7%) of the students were married. See Table 1 for more details.

Knowledge on the causes of HIV infection

The students' knowledge on the causes of HIV infection was explored. Table 2 contains the students' responses.

From the result in Table 2, 27 (90%) of the students in MOUA, 28 (98%) in ABSU, and 28 (93%) in Rhema viewed HIV infection as a virus infection, while others regarded it as either fungi, bacteria or

mixtures of bacteria and fungi. See Table 2 for details.

Later, the knowledge of how HIV can be transmitted was enquired from the students. From the students' responses, the students

were aware that HIV could be transmitted by several methods but a good proportion of them viewed HIV as mainly transmitted by sharing of sharp objects. See Table 3 for details.

Table2 : knowledge on the causes of HIV infection by institution

knowledge on Causes of HIV infection	Institutions					
	MOUA		ABSU		RHEMA	
	Pre-intervention	Post-inter	Pre-intervention	Post-inter	Pre-inter	Post-inter
Virus	27 (90%)	27 (90%)	28 (98%)	28 (93%)	28 (93%)	28 (93%)
Bacteria	2 (7%)	2 (7%)	1 (3%)	1 (3%)	0%	0%
Fungi	2 (7%)	2 (7%)	1 (3%)	1 (3%)	0%	0%
Bacteria and Fungi	1 (3%)	0%	0%	0%	1 (3%)	0%
None of the above	3 (10%)	3 (10%)	3 (10%)	3 (10%)	4 (13%)	4 (13%)

Note: Multiple answers are expected. .

Table 3: Knowledge about methods of HIV Transmission by institution

Awareness of HIV Transmission	Institutions					
	MOUA		ABSU		RHEMA	
	Pre-intervention	Post-inter	Pre-intervention	Post-inter	Pre-intervention	Post-inter
Hugging	1 (3%)	1 (3%)	0%	0%	1 (3%)	0%
Public Toilet	4 (13%)	4 (13%)	3 (10%)	3 (10%)	1 (3%)	2 (7%)
Sharing Food	1 (3%)	0%	0%	0%	0%	1 (3%)
Sharing Razor Blades	27 (90%)	29 (97%)	28 (93%)	28 (93%)	26 (87%)	27 (90%)
Using same bath towel	3 (10%)	6 (20%)	1 (3%)	1 (3%)	0%	0%
By Kissing	7 (23%)	10 (33%)	6 (20%)	4 (13%)	7 (23%)	11 (37%)
Any Other (Unprotected sex like not using condom)	13 (43%)	6 (20%)	11 (37%)	7 (23%)	12 (40%)	15 (50%)

Note: Multiple answers expected.

Knowledge on HIV prevention methods

Students' knowledge on methods of HIV prevention was examined in each of the universities studied. The students' responses are contained below.

Table 4: knowledge on methods of HIV prevention by institution

Awareness on HIV Prevention methods	Institutions					
	MOUA		ABSU		Rhema	
	Pre-intervention	Post-inter	Pre-intervention	Post-inter	Pre-intervention	Post-inter
Using lubricants during sex	0%	0%	0%	0%	0%	0%
Using microbicides during sex	0%	2 (7%)	0%	0%	0%	0%
Taking anti-retroviral drugs after sex	0%	3 (10%)	0%	0%	0%	0%
Using condoms for sex	4 (13%)	13 (43%)	7 (23%)	11 (37%)	8 (27%)	7 (23%)
do not know	14 (47%)	13 (43%)	17 (57%)	11 (37%)	19 (63%)	19 (63%)
Abstinence	10 (33%)	11 (37%)	8 (27%)	8 (27%)	6 (20%)	11 (37%)

Note: Multiple answers expected.

The responses in Table 4 show that though some of the students identified several methods of HIV prevention but a good number of them lacked knowledge of HIV prevention methods. From this Table, 19 (63%) of the students in Rhema University, 14 (47%) in MOUA, and 17

(57%) in ABSU said they do not know HIV prevention methods.

The knowledge on likely infections got from sharing needles and/or cutting the body with knife as some students do in campuses was explored. Table 5 shows the students' responses.

Table 5: knowledge on likely infections got from sharing needles and/or cutting the body with knife

Risks of sharing Needles/cutting the body	Institutions					
	MOUA		ABSU		RHEMA	
	Pre-intervention	Post-inter	Pre-intervention	Post-inter	Pre-intervention	Post-inter
HIV infection	24 (80%)	26 (87%)	25 (83%)	27 (90%)	29 (97%)	28 (93%)
Malaria	1 (3%)	0%	0%	0%	0%	0%
Hepatitis infection	3 (10%)	2 (7%)	1 (3%)	2 (7%)	1 (3%)	1 (3%)
Syphilis infection	4 (13%)	5 (17%)	5 (17%)	2 (7%)	0%	1 (3%)
Tuberculosis	3 (10%)	2 (7%)	1 (3%)	1 (3%)	0%	2 (7%)
Leprosy infection	2 (7%)	2 (7%)	0%	1 (3%)	1 (3%)	0%

Note: Multiple answers expected.

The result in Table 5 shows that the students were aware that sharing needles and/or cutting the body with knife as done by drug addicts and/or cultist could predispose individuals to several infections including HIV. From the students' responses, a good proportion of the students 26 (87%) in MOUA, 25 (83%) in ABSU, and 29 (97%) in Rhema were aware that

sharing or cutting the body with sharp objects could result to HIV infection.

Meaning of unprotected sex:

The students were asked what they understood by unprotected sex. The students' responses are contained in Table 6.

Table 6: Students knowledge of the meaning of unprotected sex

Meaning of of unprotected Sex	Institutions					
	MOUA		ABSU		RHEMA	
	Pre-intervention	Post-inter	Pre-intervention	Post-inter	Pre-intervention	Post-inter
Engaging in anal sex	1 (3%)	5 (17%)	-	1 (3%)	-	1 (3%)
Engaging in oral sex	-	-	1 (3%)	3 (10%)	-	-
Having sex without condom	15 (50%)	25 (83%)	20 (67%)	22 (73%)	23 (77%)	22 (73%)
Having sex with condom	2 (7%)	3 (10%)	2 (7%)	1 (3%)	2 (7%)	3 (10%)
Having sex with many partners	3 (10%)	1 (3%)	2 (7%)	3 (10%)	2 (7%)	3 (10%)

Note: Multiple answers expected.

From the responses in Table 6, the students termed unprotected sex to mean several things but a good proportion of them 25 (83%) in MOUA, 22 (73%) in ABSU, and 23 (77%) in Rhema said unprotected sex meant having sex without condom.

DISCUSSION

The students' baseline knowledge on the cause of HIV infection was encouraging. From Tables 2 and 3, over 90% of the students were aware that HIV is a virus infection. This shows that the students had good knowledge of the cause of HIV infection. The fact that some of the students, though very few (10%) regarded bacteria, fungi and others as causative agents for HIV infection showed that some of the students still lack correct knowledge on the cause of HIV infection. Knowledge on the risks of sharing sharp objects like razor blade, syringes and others as cultists and drug addicts do in universities showed that a good proportion of the students, about 90% of them, were aware that sharing such objects constitute risks for many blood transmitted infections including HIV.

The fact that some students chose methods like using public toilets, sharing bath towels, hugging and eating together as some of the risks of HIV transmission is a clear evidence that some of them are still

ignorant of the correct methods of HIV transmission.

In exploring the students' knowledge on the strategies to prevent HIV infection, 50% of the students disapproved the use of condoms as a preventive strategy, arguing that condom use will increase immoral behaviour among students. Finding showed that 40% of the students viewed abstinence as a better strategy to prevent HIV infection than condom use. This finding shows that with more intervention to the students, a good proportion of them will adopt abstinence as the best strategy for HIV prevention. Adopting abstinence as best method for HIV prevention, will encourage reduction in HIV prevalence among adolescents. This finding agrees with those of earlier studies that the best option to protect adolescents from HIV and other sexually transmitted infections is abstinence. [4,7,9]

Furthermore, the level to which HIV risk reduction practices vary among students in the institutions studied was examined. The result showed that students in Rhema University practiced HIV risk reduction behaviours more than those in other universities studied. This is shown by the proportion of students in Rhema who did not engage in multiple sexual partners with those who approached them for sex, as well as the number of those who opted for

abstinence as the best option for HIV prevention. Also students in Rhema were more aware than others that sharing sharp objects like syringes, razor blade and others would predispose individuals to several infections including HIV. The finding that students in Rhema University practiced HIV risk reduction behaviours more than other students studied, could be attributed to the fact that as a private university, moral instructions may be regularly given to the students to increase their chastity as against what may be obtainable in Federal and State universities.

For knowledge on the meaning of unprotected sex, students of MOUA were more aware than other students that having sex without condom meant unprotected sex. The finding that the students of MOUA, as a federal university, were more aware than other students that having sex without condom amounted to unprotected sex shows the level to which the students were familiar with condom use. It is likely that a good number of the students in this university may be practicing sexual intercourse with condom use. This could mean that students from federal university might be more familiar with this technique of HIV risk reduction with condom more than those from state and private universities studied.

After the drama, it was eminent that a good number of the students started using allegory from the drama to emphasize positive moral qualities among peers. This was seen by the number of students in the universities studied who continuously recited the theme of the drama “just once, one casual sex”. Using the slang “just once, one casual sex” motivated a good number of the students to acquire proficiency in using literal languages from the drama to act as change agents to peers. In addition, it increased the number of students likely to adopt gestures in sending sensitive messages that are capable of preventing HIV risk behaviours in higher institutions of learning. Constant use of this slang may reduce the number of students who will adopt irony in HIV prevention messages to

peers. Avoiding the use of irony is expected to produce a positive effect by increasing the number of students with correct knowledge on methods of HIV risk reduction practices. In this way, reduction in HIV prevalence among students in tertiary institutions will be sustained.

CONCLUSION

Based on the result of the study, drama highlighted HIV risk behaviours that could be modified to achieve low HIV prevalence among university students. From the results, drama created awareness on the consequences of sexual risk taking. Drama therefore, is a valuable and timely intervention strategy capable of encouraging HIV risk reduction practices among university students.

REFERENCES

1. Barbot O. Getting our heads out of the sand: using evidence to make system wide changes *Am J Prev Med* 2012; 42(3):311-12.
2. Bauer G., Davies J. K., and Pelikan J. The EUHPID Health Development Model for the classification of public health indicators. *Health Promotion International* 2006; 21:153-159.
3. Bertrand JT, Anhang R. The effectiveness of mass media in changing HIV/AIDS-related behaviour among young people in developing countries. *World Health Organ Tech Rep Ser* 2006; 938 205–41; discussion 317–41.
4. Emler, C. A.. A comparison of HIV stigma and disclosure patterns between older and younger adults living with HIV/AIDS. *AIDS Patient Care STDS*, 2006; 20(5), 350-358.
5. Fredriksen-Goldsen, K. I., Kim, H. J., Emler, C. A., Muraco, A., Erosheva, E. A., Hoy-Ellis, C. P., et al.. The aging and health report: disparities and resilience among lesbian, gay, bisexual, and transgender older adults. Seattle, WA: Institute for Multigenerational Health 2011.
6. Foster, V., Clark, P. C., Holstad, M., M. & Burgess, E.. Factors associated with risky sexual behaviors in older adults. *Journal of the Association of Nurses in AIDS Care* 2012; 23(6), 487-499.

7. Ford N, Calmy A, Mofenson L. Safety of efavirenz in the first trimester of pregnancy: an updated systematic review and meta-analysis. *AIDS*. 2011 Nov 28. 25(18):2301-4.
8. Gini G., Pozzoli T., Borghi F., and Franzoni L. The role of bystanders in students' perception of bullying and sense of safety. *Journal of School Psychology* 2008; 46:617-638.
9. Harvey B., Stuart J., and Swan T. Evaluation of a drama-in-education programme to increase AIDS awareness in South African high schools: a randomized community intervention trial. *International Journal of STD & AIDS* 2000; 11:105-111.
10. Joronen K., Rankin S. H., Åstedt-Kurki P. School-based drama interventions in health promotion for children and adolescents: systematic review. *Journal of Advanced Nursing* 2008; 63:116-131.
11. Kirk, J. B., & Goetz, B. M.. Human immunodeficiency virus in an aging population, a complication of success. *Journal of the American Geriatrics Society* 2009; 57(11), 2129-2138.
12. Kohli, R., Klein, R., Schoenbaum, E. E., Anastos, K., Minkoff, H., & Sacks, H. S.. Aging and HIV infection. *Journal of Urban Health* 2006; 83(1), 31-42.
13. Myer L, Zulliger R, Bekker LG, Abrams E. Systemic delays in the initiation of antiretroviral therapy during pregnancy do not improve outcomes of HIV-positive mothers: a cohort study. *BMC Pregnancy Childbirth*. 2012 Sep 11. 12:94. [Medline].
14. Kenny J, Mulenga V, Hoskins S, Scholten F, Gibb DM. The needs for HIV treatment and care of children, adolescents, pregnant women and older people in low-income and middle-income countries. *AIDS*. 2012 Dec. 26 Suppl 2:S105-16.
15. Onen, N. F., Shacham, E., Stamm, K. E., & Overton, E. T.. Comparison of sexual behaviors and STD prevalence among older and younger individuals with HIV infection. *AIDS Care* 2010; 22(6), 711-717.
16. Patterson TL, Volkmann T, Gallardo M. Identifying the HIV transmission bridge: Which men are having unsafe sex with female sex workers and with their own wives or steady partners? *J Acquired Immune Deficiency Syndrome* 2012; 60:414-420.
17. Weed SE. sex education programs for schools still in question: a commentary on meta analysis *Am J Prev Med* 2012; 42(3):313-15.
18. World Health Organization. Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations. Geneva, Switzerland: World Health Organization; 2014. Available at: <http://www.who.int/hiv/pub/guidelines/keypopulations/en/> September1, 2016)
19. Wright, P. R. Drama education and development of self: Myth or reality? *Social Psychology of Education* 2006; 9:43-65.
20. Grant RM, Lama JR, Anderson PL, et al. Preexposure chemoprophylaxis for HIV prevention in men who have sex with men. *New Engl J Med* 2010;363:2587-2599]
21. Baeten JM, Donnell D, Ndase P, et al. Antiretroviral prophylaxis for HIV prevention in heterosexual men and women. *New Engl J Med* 2012;367:399-410]
22. Thigpen MC, Kebaabetswe PM, Paxton LA, et al. Antiretroviral preexposure prophylaxis for heterosexual HIV transmission in Botswana. *New Engl J Med* 2012;367:423-434]
23. Dunbar JM, Marshall GD, Hovell MF: Behavioural strategies for improving compliance. In *Compliance in health care*. Edited by Haynes RB, Taylor DW, Sackett DL. Baltimore: Johns Hopkins University Press; 1979:174-190.
24. Simoni JM, Pearson CR, Pantalone DW, Marks G, Crepaz N: Efficacy of interventions in improving highly active antiretroviral therapy adherence and HIV-1 RNA viral load: a meta-analytic review of randomized controlled trials. *J Acquir Immune Defic Syndr* 43(Suppl 1):S23-S35. 2006
25. Mannheimer SB, Morse E, Matts JP, Andrews L, Child C, Schmetter B, Friedland GH: Sustained benefit from a long-term antiretroviral adherence intervention: results of a large randomized clinical trial. *J Acquir*

- Immune Defic Syndr 43(Suppl 1):S41-S47. 2006
26. Michie S, Abraham C: Interventions to change health behaviours: Evidence-based or evidence-inspired? *Psychol Health* 2004, 19:29-49.
 27. Haynes RB, McDonald H, Garg AX, Montague P: Interventions for helping patients to follow prescriptions for medications. *Cochrane Database Syst Rev* 2002, (2):CD000011.
 28. Theunissen NCM, de Ridder DTD, Bensing JM, Rutten GEHM: Manipulation of patient-provider interaction: discussing illness representations or action plans concerning adherence. *Patient Educ Couns* 2003, 51:247-258.
 29. Griffin SJ, Kinmonth A, Veltman MWM, Gillard S, Grant J, Stewart M: Effect on Health-Related Outcomes of Interventions to Alter the Interaction Between Patients and Practitioners: A Systematic Review of Trials. *Ann Fam Med* 2004, 2:595-608.
 30. Posse M, Baltussen R. Barriers to access to antiretroviral treatment in Mozambique, as perceived by patients and health workers in urban and rural settings. *AIDS Patient Care STDS*. 2009;23:867-875.
 31. Tuldra A, Fumaz CR, Ferrer MJ, Bayes R, Arno A, Balague M, Bonjoch A, Jou A, Negro E, Paredes Ruiz L, Romeu J, Sirera G, Tural C, Burger D, Clotet B: Prospective randomised two-arm controlled study to determine the efficacy of a specific intervention to improve long-term adherence to highly active antiretroviral therapy. *J Acquir Immune Defic Syndr* 2000, 25:221-228.
 32. Armitage CJ, Conner M: Reducing fat intake: Interventions based on the theory of planned behaviour. In *Changing health behaviour*. Edited by Rutter D, Quine L. Buckingham: Open University Press; 2002:87-104.
 33. Michie S, Johnston M, Abraham C, Lawton R, Parker D, Walker A: Making psychological theory useful for implementing evidence based practice: A consensus approach. *Qual Saf Health Care* 2005, 14:26-33.
 34. Haynes RB, McDonald H, Garg AX, Montague P: Interventions for helping patients to follow prescriptions for medications. *Cochrane Database Syst Rev* 2002, (2):CD000011.
 35. Eccles M, Grimshaw J, Walker A, Johnston M, Pitts N: Changing the behavior of healthcare professionals: The use of theory in promoting the uptake of research findings. *J Clin Epidemiol* 2005, 58:107-112.
 36. Meekers, D., Silva, M., and Klein, M. Determinants of condom use among youth in Madagascar. Washington, D.C., Population Services International [PSI], 2003 18 p. (PSI Research Division Working Paper No. 55)
 37. Fernandez ML, Garrido JM, Alvarez AC: A qualitative study of the viability of usage of the female condom among University students. *Int J Clin Health Psychol* 2006; 6 (1):189 – 198.
 38. Okunlola M.A, Morhason -Bello OI, Owonikoko OM, and Adekunle AO: Female condom awareness, use and concern among Nigerian Female undergraduates *J Obst et Gynaecol* 2006; 26(4):353-356 11
 39. Motlatso M, Karl Petlaer. HIV sero-status disclosure and sexual behavior among HIV positive patients who are on ART in Moumalanga, South Africa. *J Hum Ecol*, 2011; 35 (1): 29-41.
 40. Sarah N, Lynn A, Christopher T et al. Reasons for disclosure of HIV status by people living with HIV/AIDS and in HIV care in Uganda: An Exploratory study. *AIDS patient care and STD's* 2010, vol 24 (10) 2-7

How to cite this article: Enwereji EE, Akubugwo EI, Onwuka JO et al. Using drama for investment and management of HIV and AIDS risk reduction practices in selected universities in Abia state: a controlled study. *Int J Health Sci Res*. 2017; 7(9):184-191.
