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# The Practice of Using and/or Cutting The Body With Sharp Objects: A Case Study of University Students' Risk Awareness in Selected Universities in Abia State

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#### Abstract

**Introduction:** The practices of having extreme and permanent body modifications as in tattoos and scarifications are gaining popularity among youths especially those in the universities. Not minding the unbearable and painful pressure of sharp objects on the tissues and the risk of being infected with blood transmitted infections including HIV, youths still engage in these practices. This study aimed to examine the extent to which university students are aware of the risks of using improperly sterilized and disinfected sharp objects.

### Materials and method:

First year students in three universities, Federal, State and Private Universities were used for the study. A random sample of ninety (90) students made up of 30 students from each of the three universities studied was used. Drama was used as an intervention that will create awareness on risks of utilizing sharp objects in making scarifications. The completed copies of self-administered pre- and post-drama questionnaire were collected and analyzed quantitatively using Tables and percentages.

#### **Results:**

Results showed that a good number of students 29 (97%) in Michael Okpara University of Agriculture (MOUA), 28(93%) in Abia State University (ABSU) and 27(90%) in Rhema University viewed sharing sharp objects like razor blades and syringes as risk to blood transmitted infections especially HIV. A total of 28(31%) of students both males and females in MOUA, ABSU, and Rhema had marks (scarification and/ or tattoos) on the body. The main reason for having the marks was for traditional identification and this was more among students in MOUA than in others.

#### Conclusion:

Based on the results of the study, drama proved to be a valuable and timely intervention strategy that created awareness among university students on the risks of using sharp objects to make marks on the body.





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## Introduction

Evidence has shown that a significant youths for several reasons, tend to proportion of practice tattooing, piercing, scarification and others. In the process, scars are formed by cutting or branding the skin using sharp objects. Scarification which occurs on the dermis, far above fatty tissues and muscles is an illegal practice in some countries including Nigeria[1]. Scarification involves the removal or branding of the skin with sharp objects, therefore, the dangers of getting blood borne infections like HIV, hepatitis and others are likely. The practice of scarification leaves an open wound and good hygiene is incredibly important to prevent other infections [1-3]. This practice of scarification among some youths is very worrisome considering the fact that in 2001, the HIV prevalence was about 5.8% and by 2014 health workers and researchers worked hard to reduce the HIV prevalence to 3.8% thereby minimized the burden of HIV in Nigeria by about 65% [4]. This fete of reducing HIV prevalence was mainly achieved by researchers using educational interventions like drama and role plays to sensitize and create positive behaviour changes among youths. As a result of using drama, youths acted as change agents to their peers [5]. It was also shown that watching individuals performing drama and role plays on the stage, produced holistic approaches that initiated solutions to problems [5,6]. Therefore, drama and role plays were presumed be veritable intervention strategies to capable of reducing the practice of scarifications among youths in institutions of higher learning. This study used drama and role plays to provide emotional and cognitive experiences that created awareness on the risks of scarification.

Historically, in Nigeria, the practice of tribal marks, or scarifications served the purposes of identifying tribes of one's origin as well as eternal membership of fraternity bodies[6]. Tribal marks were also used to identify family members kidnapped during communal conflicts or slave trade. The scars on the faces and other parts of the body of those kidnapped or under slavery helped to identify their heritage. As a result, tribal marks or scarification served as checks on incest and intra marriages among families that are blood related [7-9].

In some developing countries including Nigeria, the practice of having marks on the body has been banned because of the resultant social and health risks. However, public outcry against the decision made the ban in some countries to be slightly upturned [4,10-12]. For instance, Nigeria's (2003) Child Rights Act section 24(1) declared that no person shall tattoo or make skin marks on any child. The Child Rights further defined "skin marks" as "any ethnic or ritual cuts on the skin which leave permanent marks that could disfigure and expose the child to infections" (Section. 27(7). According to the law, the penalty for violating this provision shall be a fine of 5,000 Nigerian naira [about \$15 US] or in the alternative, a prison term of up to a month, or both (Nigeria 2003 Child Rights Act, Section 24(2), but no one has ever been strictly convicted for violating this law, hence, some individuals still indulge in making skin marks [13].

Sources have shown that the continued prevalence of scarifications among youths in higher institutions reflect the view that some youths may lack knowledge of the risks they are exposed to by having marks on the body. It suggests the need to equip youths with feasible intervention strategies capable of





enlightening them on the consequences of making scarifications [14-17]. In practice, making tribal marks, and/or incisions are fraught with dangers because most of the instruments used for the cuttings are practices that would break the unsterilized. Such skin and mucus membranes during cutting, suggest likely increase in infections with blood borne pathogens and others including tetanus, Hepatitis B, Hepatitis C, and very importantly, HIV [18-20]. Studies shown that the healing process of scarifications have leaves some scars that produce disfigurements like keloids on the body [21]. These disfigurements cause serious psychological, emotional and social problems which sometimes result to attempts by some individuals to commit suicide [22-24]. For instance ,females with disfigurements on the body experience social stigma and discrimination and find it difficult to get suitable suitors [25-27]. As a result of this, thoughts of suicide would emanate [27].

Researchers have noted that the presence of peers influence risk taking among youths because they spend substantial amounts of time with their peers, and as such, their decisions are likely to be influenced by peers [28-30]. The problem is that a good number of youths appear not sensitive to the risks of some of their decisions especially that of making scarifications during fraternal initiations [31-33]. Such youths strongly focus on the anticipated social and material benefits rather than the associated health problems of their actions. They seem to cope well with impulsive situations that are characterized by rapid and unplanned actions that are likely to expose them to negative health consequences [34-36]. Realizing that the age of most of the people infected with HIV and range AIDS are between 15 to 35 years [37, 38] and that about 80% of these infected groups are aged 20-29 makes it imperative to years [39,40] proffer intervention that will reduce the prevalence. It is against the background of reducing HIV and AIDS prevalence among the young people that this research was conceived.

This study investigated the extent to which youths in the universities are aware of the risks associated with scarification. It also examined the likelihood of using drama and role plays to increase the awareness of youths on the risks of scarification.

## **Ethical Consideration**

Ethical Review Committee of the Abia State University approved the project before the commencement of the study. After the approval from the ethical committee, informed consent was sought and obtained from the Deans of Students' Affair in each university as well as that of the students in the three universities studied .

#### **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), 2 polytechnics, 2 teacher training institutes and 2 schools of health technology. 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, seven primary health care centres and a host of private hospitals.

#### Materials and Methods

The study used a non-experimental pre-post research design. The three universities in Abia State, one private, one State and the other Federal were The three universities are Michael Okpara studied. 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 interventions in the form of drama and role plays which lasted for three days and were presented by a Consultant. The drama and role plays adopted by the Consultant and his group included allegory, symbolic narrative and catharsis . The symbolic narrative of the risks students are exposed to when they submit to scarifications whether for beautification or identification



with fraternal groups was highlighted while catharsis was initiated by creating pity and fear to encourage the students to shun activities that would suggest the use of sharp objects. Role plays in form of "process drama" introduced the students to imaginary world where the risks of sharing sharp objects were highlighted. These methods that were adopted during the drama presentations were meant to create awareness on the risks associated with scarification and tattoos.

A pretest was conducted to perfect the drama and role plays. Thereafter, the drama intervention was provided to the students in their respective university self-administered campuses. Α pre-intervention questionnaire was distributed to the respondents by the researchers. At the end of the intervention, a selfadministered post-intervention questionnaire was also distributed to the respondents by the researchers. This helped to evaluate the extent to which the drama presented created awareness in the risk-reduction practices of the students. During the drama and role plays, the principal officers of each of the universities studied were present to watch the drama presentations along with the researchers and students. The presence of the principal officers of the universities during the



drama helped to motivate the students to relax and to fully cooperate with the instructions of the researchers.

In this study, drama was used as a means of promoting change that served both "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 using balloting without replacement. The pre-intervention and post-intervention responses collected from the students were analysed quantitatively using percentages and Tables.

## Result

#### Demographic Characteristics of the Respondents

Table below contains the demographic characteristics of the students

|                       | Table 1: demogra | aphic characteristics o | f 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             |                  |                         |                   |          |
| Less than 20<br>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<br>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, a total of 31(34%) males and 59(66%) females between the ages of 20-35years were studied. Majority of the students studied were single. In ABSU, 3(10%) were married, while 2(7%) were separated/divorced In Rhema, 2(7%) of the students were separated/ divorced while in MOUA all the students studied were single. See Table 1 for more details.

# Students' Exposure to Fraternal Organizations in School:

The respondents were asked whether they have been approached or coerced by fellow students to

belong to any fraternal organization other than village, ethnic or religious organizations in the school. The responses from the students showed that a total of 41 (45.6%) of them in the three universities studied were approached or coerced by fellow students to belong to fraternal organizations. See Table 2 for more details.

From Table 2, more students in Rhema University than in other universities were approached or coerced by fellow students to belong to fraternal organizations.

Further investigation was made on the gender of those who approached the students for membership to co-fraternities. The responses of the students are contained in Table3.

From Table 3, students from Rhema University were approached for fraternal membership by both male and female students more than students from MOUA

|                             |                      | Institutions          |                      |                       |                      |                       |  |  |  |  |  |
|-----------------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|--|--|--|--|--|
| Approached<br>or coerced to | MC                   | UA                    | AB                   | SU                    | RHEMA                |                       |  |  |  |  |  |
| belong to                   | Pre-<br>intervention | Post-<br>intervention | Pre-<br>intervention | Post-<br>intervention | Pre-<br>intervention | Post-<br>intervention |  |  |  |  |  |
| Yes                         | 5 (17%)              | 4(13%)                | 2 (7%)               | 5 (17%)               | 8 (28. 8%)           | 7 (26%)               |  |  |  |  |  |
| No                          | 25 (83% )            | 2 6(86.7%)            | 27 (93%)             | 24 (83%)              | 20<br>(71.2%)        | 20(74%)               |  |  |  |  |  |
| Total                       | 30(100%)             | 30(100%)              | 29(100%)             | 29(1900%)             | 28 (100%)            | 27(100%)              |  |  |  |  |  |

| ,:<br>'<br>'                            | Table 3: gender      | that appro            | ached     | or coerced the       | e students for        | fraternal me         | mbership              | <br>ا<br>اا |
|---|----------------------|-----------------------|-----------|----------------------|-----------------------|----------------------|-----------------------|-------------|
| gender that                             | Institutions         |                       |           |                      |                       |                      |                       |             |
| approached or<br>coerced                | MOUA                 |                       | ABSU      |                      |                       | Rhema                | Total                 |             |
| students for<br>fraternal<br>membership | Pre-<br>intervention | Post-<br>intervention |           | Pre-<br>intervention | Post-<br>intervention | Pre-<br>intervention | Post-<br>intervention |             |
| Males only                              | 3(10%)               | 2(7%)                 |           | 2(7%)                | 5(17%)                | 8(27%)               | 9(30%)                | 29(33%)     |
| Females only                            | 3(10%)               | 1((3%)                |           | 0%                   | 0%                    | 3(10%)               | 2(7%)                 | 11(12%)     |
| Both sexes                              | 0%                   | 0%                    |           | 0%                   | 0%                    | 2(7%)                | 3(10%)                | 5(7%)       |
| Total                                   | 6(20%)               | 3(10%                 | <b>()</b> | 2(7%)                | 5(17%)                | 13(43%)              | 14(47%)               | 45(50%)     |





#### and ABSU.

When the average number of students that approached the students was examined, it was noticed that in MOUA an average of 2 students, in ABSU, average of 5 students, while in Rhema, an average of 9 students approached each student for membership to fraternal organizations.

The sex of students who had marks on the skin either for traditional, aesthetic, fraternal and others was explored in each of the universities studied. The responses are contained in Table 4

The result showed that a total of 28(31%) of students both males and females in MOUA, ABSU, and Rhema had marks (scarification and/ or tattoos) on the body. Out of the 28(31%) of the students who admitted they had marks on the body, 5(18%) of them are females while 23(82%) are males. See Table 4 above for details.

Reasons for scarifications were demanded from the 28(31%) students who admitted they had marks on the body. Table 5 contains the reasons the students gave: From the result in table 5, the reasons majority of the students gave for having marks on the skin include traditional identification , initiation, group identification ,protection and this was more among students in MOUA than in others.

## Knowledge on Risks Associated with the Use of Sharp Objects

Students' knowledge on risks associated with using sharp objects was explored. The students' responses by institutions are contained below.

The responses in Table 6 showed that not all the students are very knowledgeable of the risks of using sharp objects on the skin. From this Table, a total of 11 (37%) students in ABSU more than those from other universities had no sound knowledge of the risks associated with use of sharp objects. However, some students viewed hepatitis B and C, HIV, syphilis and fraternal identity as the main risks associated with scarification.

## Discussion

The current study examined the knowledge of university students on the risks of having marks

| Table 4: students with marks on the skin by institution and sex |         |         |        |          |         |           |          |  |
|---|---------|---------|--------|----------|---------|-----------|----------|--|
| have<br>marks on  | MOUA    |         | ABSU   |          | Rhema l | Total     |          |  |
| the skin  | male    | female  | male   | female   | male    | female    | Total    |  |
| Yes   | 9(10%)  | 1(1%)   | 6(7%)  | 3(3%)    | 4(4%)   | 1(1%)     | 28(31%)  |  |
| No  | 10(11%) | 10(11%) | 1(1%)  | 20(23%)  | 1(1%)   | 24(27%)   | 62(69%)  |  |
| Total   | 19(21%) | 11(12%) | 7( 8%) | 23( 26%) | 5 (5% ) | 25 (28% ) | 90(100%) |  |

| Table 5: reasons for having scarifications or tattoos on the skin by institution |           |                 |                  |                  |  |  |  |
|--|-----------|-----------------|------------------|------------------|--|--|--|
| reasons for having<br>marks on the skin  | MOUA n=10 | ABSU <b>n=9</b> | Rhema <b>n=9</b> | Total <b>=28</b> |  |  |  |
| for traditional identification   | 4(40%)    | 2(22%)          | 1 (11%)          | 7(25%)           |  |  |  |
| Beautification   | 3(30%)    | 1(11%)          | 2(22%)           | 6(21%)           |  |  |  |
| group identification   | 2(20%)    | 3(33%)          | 1(11%)           | 6(21%)           |  |  |  |
| just desired to have marks   | 1(10%)    | 2(22%)          | 2(22%)           | 5(18%)           |  |  |  |
| for initiation   | 3(30%)    | 1(11%)          | 2(22%)           | 6(21%)           |  |  |  |
| for protection   | 2(29%)    | 2(22s%)         | 1(11%)           | 5(18%)           |  |  |  |
| !  |           |                 |                  |                  |  |  |  |

\*multiple responses





(scarification, tattoos and others) on the body. The students identified a number of risks and dangers having scarifications on the body. associated with Among the risks implicated in having scarifications included Hepatitis B and C, HIV, malaria, tuberculosis, leprosy, syphilis and tetanus. The fact that some of the students mentioned tuberculosis and leprosy as part of risk factors associated with scarification shows poor knowledge of the likely risk factors of scarification. This poor knowledge exhibited by some of the students for associating infections due to overcrowding as part of risks of scarification may be responsible for such students taking actions that suggest scarification. This finding agrees with that of [6,7] that some youths, as a result of lack of sufficient knowledge on the consequences of scarification accept practices that involve bloodlettings thereby, expose themselves to infections.

In this study, a good proportion of the students studied, about 90% of them were aware that sharing sharp objects like razor blade, syringes and

others would predispose them to HIV infection. The concern about this finding is that, even though a proportion of the students are good aware that sharing sharp objects could predispose them to HIV and other blood borne infections, vet, some of the students still indulge in scarification showing that awareness of risk factors is no guarantee for protection against taking such risks. For instance, 28(31%) of the students studied had scarifications on the body but this was more among students in MOUA as federal university than in other universities. Having marks on the body was more among males than females, showing that males took more risks of scarification and exposure to HIV infection than females. This finding agrees with that of [11.13]. In these studies, those who had scarification did so because they wanted to be identified with particular fraternal groups, while in the present study, scarification was done because of beautification, traditional marks, protection and fraternity identification. This finding agrees with that of [2, 6 and 8] where youths for trivial reasons engaged in

| risks associated         |              | Institutions |              |              |              |             |  |  |  |
|--------------------------|--------------|--------------|--------------|--------------|--------------|-------------|--|--|--|
| with using sharp         | MC           | DUA          | AB           | SU           | Rhema        |             |  |  |  |
| objects                  | Pre-         | Post-        | Pre-         | Post-        | Pre-         | Post-       |  |  |  |
| 00,000                   | intervention | intervention | intervention | intervention | intervention | inter       |  |  |  |
| keloids                  | 0%           | 0%           | 0%           | 0%           | 0%           | 0%          |  |  |  |
| tetanus                  | 0%           | 2 (7%)       | 0%           | 0%           | 0%           | 0%          |  |  |  |
| malaria                  | 0%           | 3 (10%)      | 0%           | 0%           | 0%           | 0%          |  |  |  |
| HIV infection            | 4 (13%)      | 13 (43%)     | 7 (23%)      | 11 (37%)     | 8 (27%)      | 7 (23%      |  |  |  |
| Hepatitis B and C        | 14 (47%)     | 13 (43%)     | 17 (57%)     | 11 (37%)     | 19 (63%)     | 19<br>(63%) |  |  |  |
| Tuberculosis             | 3 (10%)      | 2 (7%)       | 1 (3%)       | 1 (3%)       | 0%           | 2 (7%)      |  |  |  |
| Leprosy infection        | 2 (7%)       | 2 (7%)       | 0%           | 1 (3%)       | 1 (3%)       | 0%          |  |  |  |
| Syphilis                 | 4 (13%)      | 5 (17%)      | 5 (17%)      | 2 (7%)       | 0%           | 1 (3%)      |  |  |  |
| fraternal identity       | 10 (33%)     | 11 (37%)     | 8 (27%)      | 8 (27%)      | 6 (20%)      | 11<br>(37%) |  |  |  |
| No knowledge             | 5(17%)       | 2((7%)       | 8 (27%)      | 3(10%)       | 6 (20%)      | 2(7%)       |  |  |  |
| any other,<br>(bleeding) | 2 (7%)       | 1 (3%)       | 0%           | 1 (3%)       | 1 (3%)       | 0%          |  |  |  |



tattooing and making scarifications on the body.

The fact that in this study, 62(69%) of the students studied had no marks on the body shows that a good proportion of them are protected from the risks of sharing sharp objects. These may be the group who had no interest in being identified with any co-fraternity groups. To this group, the drama intervention provided could go further to fortify their stand on not being coerced into having scarifications for any reason. This is necessary because in this study, both male and female students were coerced into joining co-fraternities in the three universities studied but this was more in Rhema, a private university than in the public universities. The finding that students were coerced into joining confraternity organizations in the private university more than in the public university could be attributed to the fact that in the private universities students are likely to be restricted from freely participating in several activities including social activities, and as a vent, they might be tempted to take risky overtures like belonging to fraternal organizations more than those in the public universities where there may not be restrictions on students' activities. This finding is in contrast with that of [7,11] where students from public schools were found as members of fraternal organizations more than those in private universities.

That the students of MOUA, as a federal university, had more marks(scarification, tattooing and others) on the body more than students from ABSU and Rhema shows the extent to which the students are exposed to blood transmitted infections. It is likely that a good number of the students in MOUA who had marks on the body may be members of co- fraternities where initiations are carried out for group identification and/or belongingness. This shows lack of respect for the law on human rights that prohibits tribal and other marks on the body. The fact that some students still put marks on the body suggests resistance to the Nigerian law which banned all forms of tribal marks. It further suggests that the students of MOUA who had marks on the body more than others, were not sensitive to the negative outcomes of making marks on the body. It is worthy to note that not only does scarification cause harm and trauma, but of importance is keeping the materials for making the marks sanitary and the wounds clean. There is fear that the students may not remember to use antibacterial solutions or soaps often,



as well as maintain good hygiene in general during scarification. Another concern is that those who provide the scarifications may not know that they need to take precautions by wearing masks to avoid the risks of blood borne infections. The fear of individuals who undertake scarification not taking precautions and maintaining hygienic conditions is also expressed by [2, 3]. This has the implication of increasing HIV prevalence among the youths.

Drama intervention used in the study generated positive effects by exposing the students to the aftermaths of accepting scarifications. It was noted that after the drama and role plays presentations, a good number of the students started using allegory from the drama to emphasize positive moral qualities among peers. This was noticed by the number of students who continuously recited a sub-section of the theme of the drama "just say no to marks on the body". Using the slang "just say no to marks on the body motivated a good number of the students to acquire proficiency in using literal languages from the drama to act as change agents to peers. Also students used gestures to send sensitive messages that are capable of preventing other students from taking the risk of scarification. This the students to avoid using enabled irony in luring fellow students into belonging to co- fraternal organizations that demand sharing of sharp objects during initializations. This practice possibly increased the students' knowledge on the consequences of sharing sharp objects. Drama was beneficial in the study. It conveyed a model which explained that behavioural impulsiveness is directly associated with risk taking. This had important implications in reducing risk taking behaviours among youths, as well as in understanding the riskiness of some behaviours. This suggests that interactions in social situations can risk-taking behaviours, particularly when reduce negative consequences are obvious. This benefit is consistent with recent findings on the factors that reduce risk taking behaviours among peers [15, 21].

## Conclusion

Drama and role plays helped to highlight behaviours that can predispose students to blood transmitted infections including HIV. From the findings in this study, drama initiated emotional feelings that created awareness on the benefits of not having scarification. Drama therefore, is a valuable and timely





intervention strategy that is capable of discouraging risk taking behaviours among university students.

The fact that some students had shrouded knowledge of the risks of undergoing scarification, calls for more enlightenment on the risks associated with scarification. Therefore, more research on risk reduction awareness creation is recommended for university students. This future research should be able to demonstrate intervention efforts capable of reducing risk -taking behaviours in the challenging age group of university students.

This study could not establish the number of students who are members of co- fraternities including cults. It was presumed that a good number of the students may not be willing to reveal their membership status for the fear of being expelled from the university. The study only concentrated on identifying students with scarifications on the body and explored the reasons for having scarifications.

### References

- Amnesty International (AI). 2013. "Nigeria." Amnesty International Report 2013: The State of the World's Human Rights.
- 2. Nigeria's National Human Rights Commission 2013.
- Nigeria. 2003. A Bill for an Act to Provide And Protect the Right of the Nigerian Child and Other Related Matters, 2003.
- United Nations (UN). April 2011. United Nations Children's Fund (UNICEF). UNICEF Nigeria - Fact Sheet: 2011. Child Rights Legislation in Nigeria, 2011.
- 5. Nigeria National Agency for the Control of AIDS 2014 'Country Progress Report 2014
- 6. Boyer TW. The development of risk-taking: a multiperspective review. Dev Rev. 2006;26:291–345.
- Gardner M, Steinberg L. Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: an experimental study. Dev Psychol. 2005;41(4):625–35.
- 8. UNAIDS 'Prevention Gap Report 2016.
- Grant RM, Lama JR, Anderson PL, et al. Pre-exposure chemoprophylaxis for HIV prevention in men who have sex with men. New Engl J Med 2010;363:2587–2599

- Steinberg L. A Social Neuroscience Perspective on Adolescent Risk-Taking. Dev Rev. 2008;28(1): 78–106.
- 11. Steinberg L. A dual systems model of adolescent risk-taking. DevPsychobiol. 2010;52(3):216–24.
- 12. End of Term Desk Review Report of the 2010-2015 Nigeria National HIV/AIDS Strategic Plan
- 13. National Population Commission 'The 2013 Nigeria Demographic and Health Survey'2013
- Pfeifer JH, Masten CL, Moore WE 3rd, Oswald TM, Mazziotta JC, Iacoboni M, et al. Entering adolescence: resistance to peer influence, risky behavior, and neural changes in emotion reactivity. Neuron. 2011;69(5):1029–36.
- 15. Nigeria Federal Ministry of Health 'National HIV & AIDS and Reproductive Health Survey 2013
- 16. Federal Ministry of Health National HIV/AIDS and Reproductive Health Survey Plus 2012
- 17. UNAIDS Data Book 2017
- Heitland I, Oosting R.S, Baas J.M, Massar S.A, Kenemans JL, Bocker K.B. Genetic polymorphisms of the dopamine and serotonin systems modulate the neurophysiological response to feedback and risk taking in healthy humans. Cognitive, affective & behavioral neuroscience. 2012;12(4):678–91.
- 19. Mehta P.H, Welker K.M, Zilioli S, Carre J.M. Testosterone and cortisol jointly modulate risktaking. Psychoneuroendocrinology. 2015;56:88–99.
- Daughters S.B, Gorka S.M, Matusiewicz A, Anderson K. Gender specific effect of psychological stress and cortisol reactivity on adolescent risk taking. J Abnorm Child Psychol. 2013;41(5):749–58.
- 21. Global AIDS monitoring : indicators for monitoring the 2016 United Nations Political Declaration on HIV and AIDS 2017
- 22. Victor E.C, Sansosti A.A, Bowman H.C, Hariri A.R. Differential patterns of amygdala and ventral striatum activation predict gender-specific changes in sexual risk behavior. The Journal of Neuroscience: The official journal of the Society for Neuroscience. 2015;35(23):896–900.
- 23. Steinberg L, Cauffman E. Maturity of judgment in adolescence: Psychosocial factors in adolescent





decision making. Law Hum Behav. 1996;20(3):249–72.

- UNAIDS and National Agency for control of AIDS (NACA), Spectrum Estimate and Projection Package 2014
- World Health Organization. Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations 2014.
- Johnston L.G, Sabin M.L, Prybylski D, Sabin K, McFarland W, Baral S et al. Policy and practice: the importance of assessing self-reported HIV status in bio-behavioural surveys. Bull World Health Organ. 2016;94:605–612
- Deckman T, DeWall CN. Negative urgency and risky sexual behaviors: a clarification of the relationship between impulsivity and risky sexual behavior. Personality and Individual Differences. 2011;51: 674–8.
- 28. Lejuez CW, Read JP, Kahler CW, Richards JB, Ramsey SE, Stuart GL, . Evaluation of a behavioral measure of risk taking: the Balloon Analogue Risk Task (BART). Journal of Experimental Psychology Applied. 2002;8(2):75–84.
- 29. U.S. Public Health Service. Preexposure Prophylaxis for the Prevention of HIV Infection in the United States–2014: A Clinical Practice Guideline. U.S. Department of Health and Human Services and U.S. Centers for Disease Control and Prevention; 2014.
- 30. Corneli A, Field S, Namey E, et al. Preparing for the rollout of pre-exposure prophylaxis (PrEP): A vignette survey to identify intended sexual behaviors among women in Kenya and South Africa if using PrEP.PLoS One 2015; 10:e0129177.
- Donnell D, Baeten JM, Bumpus NN, et al. HIV protective efficacy and correlates of tenofovir blood concentrations in a clinical trial of PrEP for HIV prevention. J Acquir Immune DeficSyndr 2014;66:340–348
- Cassell M.M., Halperin DT, Shelton JD, Stanton D. Risk compensation: The Achilles' heel of innovations in HIV prevention? BMJ 2006: 332:605–607]
- Wang.C, Ma,Y.H. Attitude and the skills of HIV/ AIDS among secondary school students in Beijing [in Chinese]. Chin J Sch Health 2007;28:309–11

- Gamarel K.E, Golub S.A. Intimacy motivations and pre-exposure prophylaxis (PrEP) adoption intentions among HIV-negative men who have sex with men (MSM) in romantic relationships. Ann Behav Med 2015;49:177–186]
- Eaton LA, Kalichman S. Risk compensation in HIV prevention: Implications for vaccines, microbicides, and other biomedical HIV prevention technologies. Curr HIV/AIDS Rep 2007;4:165–172
- 36. 36. Merrigan M.B, Tafuma T.A, Okui LA, et al. HIV prevalence and risk behaviors among female sex workers in Botswana: Results from the 2012 HIV/ STI bio-behavioral study. AIDS Behav 2015;19: 899–908
- Deering KN, Lyons T, Feng CX, et al. Client demands for unsafe sex: The socioeconomic risk environment for HIV among street and off-street sex workers. J Acquir Immune DeficSyndr 2013;63:522–531
- Lou J.H, Wamg,X.J, Cheng Y, Tu X.W, Gao ES. The influence factors of heterosexual contact and behavior among vocational school students [in Chinese]. Chin J Public Health 2007;23:985–6
- Grant RM, Anderson PL, McMahan V, et al. Uptake of pre-exposure prophylaxis, sexual practices, and HIV incidence in men and transgender women who have sex with men: A cohort study. Lancet Infect Dis 2014;14:820–829
- 40. Gao Y, Lu ZZ, Shi R, Sun XY, Cai Y. AIDS and sex education for young people in China. Reprod Fertil Dev 2001;13:729–37