CULTURE AND HIV/AIDS IN AFRICA: PROMOTING REPRODUCTIVE HEALTH IN THE LIGHT OF SPOUSE-SHARING PRACTICE AMONG THE OKUN PEOPLE, NIGERIA

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ABSTRACT

The Okun tribe numbering about a million persons accepts sexual relation between men and wives of their male kin. Features of spouse-sharing that impact on reproductive health were identified and used to develop an interactive community-based intervention. The intervention promoted discussion of spouse-sharing as a risk factor in HIV/AIDS transmission, knowledge of AIDS/STDs, perception of risk and alternative behaviors to avoid contracting HIV/AIDS. The intervention effects were evaluated using data collected in baseline and follow-up surveys in May 1999 and June 2000 among 1018 sexually active respondents in two sets of Okun communities - one with and the other without intervention. The intervention significantly raised awareness about HIV/AIDS, perception of risk of contracting the disease and the intention to discontinue spouse-sharing in the intervention communities. Lessons learned during the intervention are described as means of informing future community based interventions to address traditional practices that could transmit HIV/AIDS.

INTRODUCTION

UNESCO supported studies on the cultural dimension of HIV/AIDS in Uganda, Malawi, Angola, Zimbabwe and South Africa in 1999, revealed that traditional practices are contributing to the spread of HIV/AIDS in different parts of Africa (UNESCO 1999). These practices relate to the age at which girls are given out in marriage, polygamy, extra marital sex, widow inheritance, and spouse-sharing. While some of the practices are wide spread and cut across all the countries studied, others are specific to particular ethnic groups and societies. In Nigeria various studies of Yoruba culture in the Southwest region have confirmed the wide-spread existence of extra marital sex in the form of spouse-sharing (Ward 1937; Fadipe 1970; Orobuloye, Caldwell and Caldwell 1991; Messersmith 1994; Adegbola and Babalola 1999). Orubuloye et al. (1992) and Adegbola and Babatola (1999) have pointed out that the spread of HIV may be facilitated by sexual networking involving sex with relatives by marriage among men and women in the general population.

Africa has a disproportional share of the HIV/AIDS burden. The major mode of HIV infection on the continent is heterosexual transmission, accounting for about 80% of the cases. The culture of the society, its traditions, marriage and family institutions have a lot to do with sexual behavior and practices of its members. Behavior is based on 'reasoned action' which is, in turn rooted in the beliefs and attitudes of the people, together these constitute the substratum for action and behavioral change, (Fishbein and Azjen 1969). A change in sexual behavior remains the most important weapon Africans have in the battle against the spread of HIV/AIDS. Behavioral change programs against traditional practices that could transmit HIV/AIDS constitute an important challenge in different parts of the continent. This report documents an attempt to promote the knowledge of HIV/AIDS, create an awareness of vulnerability and risk associated with spouse sharing with a view to discouraging the practice, and improve reproductive health among the Okun people in the middle belt region of Nigeria.

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Reasons for Spouse Sharing among the Okun

The Okun tribe, numbering about a million persons accepts sexual relation between men and wives of their male kin in a practice traditionally referred to as *ale/alase*[i]. Several reasons[ii] were advanced for the continued existence of spouse-sharing in the Okun society (see Osagbemi and Adepetu 2001). The initiation and sustenance of spouse-sharing require exchange of gifts in the form of materials and money. These gifts, apart from enticing people to participate in the practice, provide a form of assistance to those in need – widows, women and children. One prominent argument in favor of spouse sharing is that it keeps resources meant for seducing women within the clan and extended family circle.

Okun custom supports early marriage and young girls are ready for marriage at puberty or even before. Young girls given out in marriage to much older men may seek sexual satisfaction and reproductive fertility with younger men of the clan. Similarly, polygamists are known to marry young girls to raise children through their elder sons or younger relatives. The society places premium on its adult members having children of their own even though such adults may not biologically father or mother such children. For instance, the family encourages men and women who are impotent or sterile to marry wives and women in such marriages are impregnated by young men of the clan.

New wives who fail to have children after an expected period are encouraged to make themselves available for sharing. The belief is that the sterile woman's blood is probably not compatible with that of her husband[iii]. She is expected to look for a man (ale) within the family whose blood "rhymed" with her own and who would 'open up' her womb now and for subsequent fertility. It was argued that many women suspected to be barren had given birth through this practice. Spouse-sharing is supposed to be a solution to many marital problems. The reckoning is that a woman once married into the family who proved to be fecund and upon whom the family resources had been expended should not be allowed to divorce on the grounds of insignificant quarrels and simple resolvable marital problems[iv].

To men, it is customary to have *ale* or *alase* and a "real man" requires between two and three women in his life time. To the women, having *ale* is seen as a proof of greater control over their sexuality in a world generally dominated by men. There are wide spread feelings that the real reasons for the practice of spouse-sharing is shifting from more beneficial traditional ones[v] to mere gratification of sexual urge.

METHODOLOGY

Survey Design

The study made use of a quasi-experimental design involving two sets of Okun communities - one in which interventions took place and the other in which there was no intervention. The intervention settlements comprised of Isanlu - a local government headquarters and two rural settlements - Ejuku and Ijowa. The non-intervention communities comprised of Mopa - a local government headquarters and another two rural villages (Effo and Ponyan). In 1996, the estimated populations of the studied settlements were as follows: Mopa; was 10,405; Effo, 5,790; Ejuku, 5,644; Ijowa, 8,216 and Ponyan, 7,371 and Isanlu had a population of 14,446 people (National Population Commission Field Office, Isanlu).

A pre-intervention survey of 1029[vi] sexually active Okun men aged 16 to 60 years and ever married women aged 12 to 49 years was conducted in May 1999. The survey consisted of two parts: a knowledge, attitude, behavior and practice (KABP) survey with the 1029 respondents and a focus group discussion (FGD) among 86 informants (Result of the FGD has been reported elsewhere (see Osagbemi and Jegede 2001). The post intervention survey conducted in June 2000 was a follow up of the 1029 respondents who participated in the 1999 baseline survey. A total of 1018 respondents were traced, located

and interviewed in the 2000 post intervention survey, 588 in the intervention communities and 430 in the non-intervention communities. Eleven persons could not be traced 3 in the intervention and 8 in the non intervention communities. Three cluster sampling stages were adopted to reach the eligible respondents: selection of settlements[vii], enumeration areas [EAs] in each selected settlement, and households in the selected EAs.

Questionnaire was administered in a face to face interview to randomly selected eligible respondent in every sampled household. In all cases, respondents and interviewers were matched together by sex. Respondents had the right to decline answer to any question if they so chose or decline interview but none chose to do so during the surveys. Detailed sampling procedures have been described elsewhere (Osagbemi and Adepetu 2001; Osagbemi and Jegede 2001).

THE INTERVENTION PROGRAM

The intervention program was conducted between May 1999 and April 2000. To evolve the intervention strategy, three consultative meetings were held with opinion and community leaders concerning various options that could be used to reach the people with the intervention messages. The need for culturally sensitive strategies with the potential to reach more people in a rural setting, with high local input and participation dominated the consideration. At the end of the third meeting a consensus was reached involving drama, posters, and peer education to be preceded by a cultural carnival in an open day ceremony. It was decided that these strategies should be adopted first and their impact evaluated before considering other strategies. The drama addressed the cultural context of spouse sharing, while the posters and the peer education program addressed the factual information about HIV/AIDS. The three strategies therefore complemented each other to address the issue of spouse-sharing and HIV/AIDS in the Okun communities.

This study draws ideas from step-to-behavior-change framework, which synthesizes theories of communication and behavior change into a practical model to guide reproductive health communication programs. The framework describes five stages through which people pass as they change their behavior: knowledge, approval, intention, practice and advocacy. Effective communication campaigns determine the stage that their audience is at and focus their energy accordingly. During the period of the study, HIV/AIDS information was just beginning to spread uniformly among the Okun and many people could not relate their behavior to the new disease. The Okun study focused on the three earliest stages (Piotrow 1997; Kim et al. 2001), when people learn key information and skills, discuss campaign messages, and express an intention for a new behavior and find support for a behavior change among their family and community.

Against this background, the study makes use of two derived hypotheses among others:

1) That an intervention program designed to discourage the practice of spouse-sharing and improve knowledge of HIV/AIDS in Okun community will significantly increase the people's perception of risk of contracting the disease.
2) That people with higher knowledge of HIV/AIDS and who perceive that they are at risk of contracting the disease will be more likely to discontinue spouse-sharing or express an intention to do so.

The Intervention Package

Open Day Jamboree and Distribution of Posters

The Open Day in each settlement attracted attention and drew participation from the local community, heightened HIV/AIDS awareness and provided the context for the launching of other intervention strategies – drama, peer education and posters. On the eve of the open day ceremony, each community leader authorized the town crier to notify its members

about the enlightenment program. The support of the traditional rulers who are the custodians of the people's traditions and customs gave credibility to our presence.

The message of the intervention was used to compose songs which were sung together with other HIV/AIDS songs coined elsewhere. To add more fun, the traditional *bata* drummers and dancers, and the Boys' Scout band entertained guests. The peer health education committee and the community drama group were officially presented to the communities all dressed in their intervention promotional vest and face-caps. As part of the launching, the first drama was staged. And to mark the end of the Open Day, relevant posters were distributed to the youths who while accompanying the band and dancing to its music, distributed the posters to members of the communities as well as placed some in strategic locations in the settlements. Two sets of posters were distributed, each carrying short factual messages on HIV/AIDS with pictorial illustrations. The first displayed the message that AIDS is real, kills and has no cure. The message in the second poster was that one could get HIV/AIDS by having ale/alase or have sex with more than one person, use of unsterilized needle/razor blade and blood transfusion. It advised people to say no to spouse sharing and multiple sex partners. The open day was used to inform the people about these activities as the success of the intervention program required their support.

Drama Presentations

The drama presentations, which were usually very entertaining, mirrored the practice of spouse-sharing in the communities and provided the context for addressing many aspects of the practice considered to be at variance with reproductive health. The play consisted of five parts, all designed to sensitize people on the risk of spouse sharing and the need to imbibe self-protective behaviors in the light of HIV/AIDS. The first part started with young men and women who were exposed to the risk of involvement in the practice of spouse sharing. The second part dealt with the process of spouse sharing; its initiation and the various aspects of the practice that put those involved at the risk of contracting HIV/AIDS. The third part featured problem situations, families and individuals who were afflicted with sexual and reproductive problems, unwanted pregnancies, infertility and even deaths resulting from AIDS.

The fourth part presented various alternatives for protection against STDs including HIV/AIDS namely; non-involvement in spouse sharing, staying faithful to one sex partner, and abstinence. It also focused on the treatment and management options for STDs and advised prompt visits to health centers. It also stressed the importance of discussion among partners to prevent reproductive health problems. The use of condoms was presented as a feasible option for prevention. Wrong approaches to treatment, which were highlighted in specific scenes include, use of charmed rings, waste bands and self-prescribed antibiotics. Protection against vulnerability to involvement in spouse sharing, particularly among women was also presented as a viable option for protection against STDs including HIV/AIDS. These options include employment and pursuit of income generating activities. The last part portrayed a clan or extended family meeting to identify the root causes of the community's sexual and reproductive health problems, one of which was the practice of spouse sharing and multiple sexual partnering.

Thereafter, the clan head appealed to members of his clan against involvement in the practice of spouse-sharing and the keeping of multiple sex partners. He stressed the need to adopt self-protective behaviors in the light of HIV/AIDS. Each play ended with *ewi* – a poem presented by selected members of the drama group. The poems contained basic facts on HIV/AIDS, the symptoms, the incurability of AIDS, and the need for everybody to protect himself/herself against infection. At the end of each drama session the spectators were usually advised to visit the Peer Health Educators (PHE) stationed nearby for counseling about HIV/AIDS.

Peer Health Education Program

One objective of the peer health education program was to make the impact of the interventions more sustainable by having their messages repeated and discussed among peers/groups in the intervention communities. Peer educators were volunteers from religious groups, age grades, schools, and cooperative unions in the communities. Important criteria that were considered in the selection of PHEs included sex, age and the ability to read and write at least in the local language. Most importantly, those selected demonstrated enough interest to participate in the study, particularly the training aspect.

The training comprised four major parts. In the first part, the most important research findings from the 1994 and baseline survey of 1999 were presented. The focus was on the people's level of knowledge and awareness of STDs, HIV and AIDS and some misconceptions. Information on the prevalence of the practice of spouse sharing in the community and cases of self-reported STDs among the study population were also given. In the second part, basic facts about STDs and HIV/AIDS were presented. It focused on misconceptions, facts and fallacies about STDs and HIV/AIDS transmission. Basic information on STDs was also provided particularly on the three major syndromes (genital ulcer, genital discharge and boil in the groin). The medical terms for these, their signs and symptoms, curability, possibility of treatment with modern medicines, negative consequences of non-treatment and the possibility of being asymptomatic were discussed. The third part of the training focused on various alternatives for prevention. It was repeatedly stressed that one can opt for non-involvement in spouse-sharing, postponement of sex or abstinence, keeping of one faithful partner, or the use of condoms as possible ways of avoiding STDs including HIV/AIDS. Specific emphasis was laid on how to avoid being vulnerable to the practice, particularly among the women, by encouraging the pursuit of worthwhile economic and income generating activities. Thereafter, there was a demonstration of the use of condoms. The fourth part was devoted to an explanation of their roles and tasks as PHEs. Finally, some role-play was carried out in which the participants acted as PHEs and some as peers posing questions on sexual behavior and protection.

At the end of the training, each of the 80 participants received an outline summary of the major findings of the previous studies in English and the interpretation into the local language, a primer on STDs and HIV/AIDS, a packet of condoms and 50 posters. The AIDS education materials, which were reproduced with some modifications, were partly provided by the Planned Parenthood Federation of Nigeria (PPFN), and National STI/AIDS Control Program at Lokoja, the Kogi state capital. The research team and a nurse took care of all presentations. The nurse effectively took care of medical issues raised during the training while the principal investigator coordinated the training.

The peer educators were given a modest task; each peer educator was required to counsel at least one person per day during the period of the intervention. They were to request those counseled to counsel others. Oral education is well rooted in many Okun communities. The people have over the years, passed important information on topical issues from generation to generation in what is generally called “tales by the moonlight”. Some gifted storytellers are very effective in this area. Those recruited were very valuable for the peer health educator program. Some of the educators used the messages of the intervention to form stories, which proved very valuable in their counseling.

RESULTS

Respondents in the intervention communities (N=588) and non-intervention communities (N= 430) completed a post intervention survey questionnaire identical in content to the pretest questionnaire. Table 1 contains information on selected background characteristics of the sampled respondents. The study compares the respondents in the intervention communities with those of the non-intervention communities using a number of parameters which included knowledge of HIV/AIDS, perception of risk and the practice of spouse-sharing. Given that the interventions are the major sources of change, the exposed sub-sample would be expected to show greater change over time than the unexposed sub-sample with respect to these parameters. If on the other hand, the intervention program was unrelated to the observed change and some significant overall change had been found in both samples, then it would be concluded that influences other than the intervention programs had produced the change.

TABLE 1: Percentages distribution of respondents by selected characteristics for the overall sample and for the intervention and non-intervention communities

Characteristics	Variables	Community		
		All	Intervention	Non intervention
		N=1018	N=588	N=430
		2000	2000	2000
Sex	Male	50.1	49.3	51.2
	Female	49.9	50.7	48.8
Locality	LG Headquarters	52.6	56.5	47.2
	Rural villages	47.4	43.5	52.8
Age	≤ 35 years	56.6	55.1	56.9
	≥ 36 years	43.4	44.9	43.1
Educational status	No Formal Schooling	35.0	34.8	43.0
	Some Formal Schooling	65.0	65.2	57.0
Media exposure	Radio Yes	87.1	86.2	86.2
	No	12.9	13.8	13.8
Occupation	Non farming activities	34.1	34.3	33.9
	Farming	48.4	47.9	47.9
Family type	Polygamy	46.1	46.5	46.0
	Monogamy	53.9	53.5	54.0

Exposure to the Intervention Activities

In the intervention communities, approximately 1700 posters illustrated in the local language were successfully distributed. Four drama performances were staged in each settlement between May 1999 and April 2000. The 80 PHEs (20 each in Ejuku and Ijowa and 40 in Isanlu) reported that they had educated 1840 persons, (an average of 23 persons) within the period of the intervention. The intervention activities were conducted simultaneously and the aim was for each activity to complement the others and facilitate community-wide discussions of the intervention messages. To facilitate attendance, participants were specifically given invitation cards to attend the open day. The cards contained the date and time of the event in their communities. The post intervention interview revealed that the intervention activities were well attended. Over 95% of those who participated in the baseline questionnaire survey reported they experienced at least one of the intervention activities and about 87% reported exposure to two or more activities.

Knowledge of HIV/AIDS

Awareness of HIV/AIDS increased from less than 90% in both the intervention and non intervention communities to 100 percent, an indication that information about AIDS is

probably spreading uniformly in the study area[viii]. In between the pre and post intervention period more people were aware of somebody living with AIDS (38% in 2000 as against 23% in 1999) or had died of AIDS (22% in 2000 as against 16% in 1999) in their locality. There was no difference in the intervention and non intervention communities, (not shown). It was observed that though people were aware of HIV/AIDS many were unable to describe different symptom clusters as well as means through which the disease is transmitted at baseline. Knowledge of respondents about the transmission, prevention and treatment of HIV/AIDS was further tested using 14[ix] questions. Table 2 summarizes the pre and post-test results of respondents in the intervention communities matched against those of the non intervention communities.

TABLE 2: Percentages distribution of respondents who answered correctly to the fact and fallacies about HIV/AIDS according to the survey year

S/No	Fact and fallacies about STDs including HIV/AIDS	Intervention Communities		Non-intervention Communities	
		1999	2000	1999	2000
	N	**591**	**588**	**438**	**430**
1	The practice of ale/alase can facilitate the spread of HIV/AIDS in the community.	34.0 (201)	78.6 (462)***	35.4 (155)	41.4 (178)
2	HIV/AIDS can be transmitted through sexual intercourse.	72.1 (426)	99.0 (582)***	70.1 (307)	74.9 (322)
3	Only men/women get AIDS	53.0 (313)	88.9 (523)***	64.4 (282)	75.1 (323)***
4	Only sex workers transmit HIV	58.0 (343)	89.6 (527)***	62.6 (274)	67.0 (288)
5	Person can get HIV without looking sick.	33.0 (195)	74.0 (435)***	32.2 (141)	31.2 (134)
6	A person can get AIDS by shaking hand with the person who has AIDS.	55.0 (325)	80.8 (475)***	59.6 (261)	64.9 (279)
7	A person can avoid AIDS by using condom	49.1 (290)	75.3 (443)***	55.9 (244)	58.1 (250)
8	Getting AIDS is a matter of bad luck	56.0 (331)	83.5 (491)***	62.8 (275)	65.8 (283)
9	There is no cure yet for AIDS	71.1 (420)	98.6 (580)***	73.3 (321)	80.7 (347)
10	A person can avoid HIV/AIDS by having only one sex partner and no ale or alase	47.0 (278)	84.0 (493)***	67.6 (296)	72.6 (312)
11	Mosquito can spread AIDS virus.	51.9 (307)	70.2 (413)***	56.6 (248)	62.6 (269)
12	Babies can get HIV from their mothers.	31.0 (183)	70.2 (413)***	44.7 (196)	46.3 (199)
13	Traditional medicine can cure AIDS.	46.0 (272)	80.3 (472)***	66.4 (291)	70.5 (303)
14	You can not contract HIV/AIDS from an infected person by sharing the same utensils.	46.0 (272)	60.9 (358)***	48.2 (211)	51.6 (223)

***Significant at p<=0.001

In the intervention communities there was significant increase in all knowledge of HIV/AIDS tested. More respondents realized that spouse-sharing can facilitate the spread of HIVAIDS; 78.6% in 2000 as against 34% in 1999. The intervention was designed to increase people's understanding of the implications of their sexual behavior and to relate such behavior to their vulnerability to HIV/AIDS. Unfortunately, this has probably not happened in the non-intervention communities as many people still remain with the notion that spouse-sharing could not facilitate the spread of HIV/AIDS. The knowledge that HIV/AIDS is transmitted through sexual intercourse increased from 72.1% in 1999 to 99.0% in 2000 in the intervention communities as against 71.1% to 74.9% in the non-intervention communities.

Repeat interview produced a significant increase in the knowledge that anybody can get HIV/AIDS in both the intervention and non intervention communities thus removing

the stereotype that HIV/AIDS is a disease mostly contracted from women a wide spread belief during the baseline survey. Similarly significant number of people now know that HIV/AIDS is not only transmitted by sex workers in the intervention communities a belief that still probably pervade the thinking of those aware of the disease in the non intervention communities. The knowledge that people could contract HIV without looking sick an important message of the intervention orchestrated during the open day ceremony increased from 33% to 74% in the intervention communities but actually declined from 32% to 31% in the non-intervention communities in the 1999 and 2000 surveys respectively. The knowledge that HIV/AIDS can not be spread by mere shaking hands with an infected person, by mosquito bite, or by sharing utensils with infected person increased significantly in the intervention communities as against the non intervention communities. The wrong notions and knowledge identified during the baseline were challenge by messages contained in the drama package and correct means of transmission were disseminated through the posters. That HIV can not be transmitted through utensils and mosquito is crucial in reducing stigma associated with the disease and improve care for those already affected in the community.

Self-reported Protective Behavior

At baseline about 31% of the respondents reported experience of STDs in the last 12 months preceding the interview (Osagbemi et al., forthcoming). The Okun terms for venereal disease are *atosi* and *petele* meaning gonorrhea and syphilis respectively. At baseline a total of 483 respondents (46.9%), which increased to 594 persons (58.3%) in 2000 reported using a method or doing something to avoid STDs including HIV/AIDS in the overall sample. In the intervention communities the increase was more dramatic from 261 persons (44.2%) to 355 persons (60.4%) and less dramatic in the non intervention communities from 222 persons (50.6%) to 239 persons (55.6%) between 1999 and 2000 respectively. To crosscheck the validity of responses, a more specific question concerning what respondents actually did followed. Table 3 presents information on the reported strategies employed by the respondents to avoid contracting HIV/AIDS by survey year.

TABLE 3: Percentages distribution of respondents by coping strategies to prevent STDs/HIV/AIDS for the overall sample and for the intervention and non-intervention communities by survey year among the Okun.

Self-reported	All***		Intervention community***		Non-intervention community	
Protective Practices	1999	2000	1999	2000	1999	2000
Abstinence	9.1 (44)	8.4 (50)	9.5(25)	9.1(32)	8.5 (19)	7.5(18)
One faithful partner	64 .3 (311)	66.2 (393)	65.1(170)	70.9(252)	63.5(141)	59.0(141)
Protective Drugs/juju	19.9 (96)	14.5 (86)	18.7(48)	6.4(23)	21.6 (48)	26.4(63)
Use of condom	6.6 (32)	10.9 (65)	6.8(18)	13.5(48)	6.3 (14)	7.1(17)
Total	100.0 (483)	100.0(594)	100.0(261)	100.0(355)	100.0(222)	100.0 (239)

***Significant at p<=0.001

Analysis of the specific coping strategies shows no difference in reporting abstinence in both the intervention and non intervention communities. The percentage that reported one faithful partner which include those who reported non involvement in spouse-sharing increased from 65.1% to 70.9% in the intervention communities but decreased from 63.5% to 59.0% in the non intervention communities in 1999 and 2000. The use of protective drugs or *juju* decreased from 18.7% to 6.4% in the intervention communities but actually increased in the non intervention communities from 21.6% to 26.4%. Although knowledge of condom is high, over 70% of the respondents were aware of condom in the

baseline, the intervention does not lead to any substantial increase in condom use. Condom use increased from only 6.8% to 13.5% in the intervention communities but remains low in the non intervention communities (6.3% to 7.1%) in the 1999 and 2000 surveys.

The low use of condom is an important challenge to health promoters in the Okun community given the high prevalence of self-reported STDs, the problem of multiple sexual partnering facilitated by the practice of spouse-sharing. Condom use offers immediate protection against STDs including HIV/AIDS in the community. Peer educators were charged with the responsibility of promoting condom use during the intervention period. Culturally sensitive ways may be needed to complement peer education to improve condom use among the respondents. Generally in the intervention communities respondents were more likely to report that they were using a method or doing something to avoid HIV/AIDS ($\chi^2 = 25.48$, $p< = 0.001$) in 1999 than in 2000.

Perception of Risk of Contracting HIV/AIDS

One of the objectives of the intervention was to create knowledge and awareness of HIV/AIDS in the general population to enable individuals to rationally evaluate her or his behavior and decide whether or not she or he is at risk and if at risk, initiate action to practice safer sex. Table 4 shows that respondents were more likely to perceive that they could contract HIV/AIDS during the 2000 survey than in 1999 (71.9% vs. 50.6%) for the overall population ($\chi^2 = 97.5$, $p <= 0.001$). Similarly, perception of the risk of contracting HIV/AIDS in the period between the surveys increased significantly among respondents in the intervention communities from 52.3% to 79.7%, ($\chi^2 = 99.1$, $p <= 0.001$) . An increase was observed in the non intervention communities from 48.4% to 54.2% but the increase was not statistically significant. The intervention messages which, state that HIV/AIDS - *Jodimole* is real in Okun land, is sexually transmitted and having ale or alase can facilitate its spread probably heightened the individuals' sense of vulnerability and perception of risk in the community.

Table 4: Perception of being at risk of contracting STDs including HIV/AIDS, within the past six months by survey year

Response	All***		Intervention communities***		Non-intervention communities	
	1999	2000	1999	2000	1999	2000
Yes	50.6 (521)	71.9 (732)	52.3 (309)	79.7 (469)	48.4 (212)	54.2 (233)
No	49.4 (508)	29.1 (286)	47.7 (282)	21.3 (119)	51.6 (226)	46.8 (197)
Total	100 (1029)	100 (1018)	100 (591)	100 (588)	100 (438)	100 (430)

***Significant at p<=0.001

The Impact on the Practice of Spouse-Sharing

The need to keep one sex partner and outright discontinuation of spouse sharing were the main alternative behaviors emphasized in the drama, open day and the peer education program of the intervention. Whether the message had an impact on outright discontinuation of spouse sharing or an intention to do so is examined here. In the 2000 survey a total of 104 persons (97 in the intervention communities) reported outright discontinuation of spouse sharing and 207 persons (159 in the intervention communities) expressed an intention to do so in the future. In the 1999 survey, the average number of sex partners - *ale or alase* for the 672 respondents who reported the practice of spouse sharing was 2.9. This had reduced to 2.2 partners for the 568 people who reported involvement in the 2000 survey (not shown).

Table 5 contains information on the percentage of respondents who expressed intentions to stop spouse sharing in the intervention and non intervention communities in the 1999 and 2000 surveys. In 1999, less than 5% of the 672 sampled respondents who practiced spouse sharing expressed intentions to stop, compared to about 36% of the 568 respondents involved in spouse-sharing in 2000. This percentage increase was higher in the intervention communities (53.2%) than in the non-intervention communities (11.9%). Expression of intention to stop spouse sharing increased significantly in 2000 in the intervention communities and in the overall sample. Expressing intentions to stop spouse sharing in the next 12 months is of paramount interest to the research team given that the ultimate objective was to set in motion the process of eradicating the practice among the Okun. Whether the exposure to the program is significantly responsible for this positive intention[x] was further examined.

Table 5: Percentages distribution of respondents by whether or not they expressed intention to stop spouse sharing for the overall sample and for the intervention and non intervention communities

Have intention in next 12 months	All***		Intervention communities***		Non-intervention communities**	
	1999	2000	1999	2000	1999	2000
Yes	4.91 (33)	36.44 (207)	4.9 (20)	53.2 (159)	4.90 (13)	11.9 (32)
No	95.09 (639)	63.56 (361)	95.1(385)	46.8 (108)	95.1 (254)	88.1 (237)
Total	100 (672)	100 (568)	405[100]	299[100]	267[100]	269[100]

***Significant at p<=0.001

Table 6 contains the result of the logistic regression on the likelihood of expressing an intention to stop the practice of *ale* or *alase*. The analysis was conducted in stages. Model 1, examines differences in exposure to the intervention for the likelihood of expressing an intention to stop the practice of spouse-sharing. The effects of the respondents' knowledge of HIV/AIDS, and perception of risk were adjusted for in model 2. Measures of traditional attributes such as: type of family setting (polygamy or monogamy), occupation and urban and rural residence were adjusted for in Model 3. Model 4 incorporates socio-economic and demographic indicators such as income, educational status, radio exposure, sex and age to see if these variables mediate the effects of exposure to the intervention on reporting intentions to stop spouse sharing practice. If the exposure-intention relationship is still significant, the evidence can be said to support an inference of program effect.

In Model 1, the odd of reporting an intention to stop the practice of ale or alase is 14.9 among those exposed to the intervention in contrast to those who were not exposed. In model 2, the addition of knowledge of HIV/AIDS and the perception of contracting the disease ameliorated the relationship between exposure and having and intention to discontinue the practice of spouse-sharing. This confirms the earlier stated hypothesis that exposure will increase knowledge of HIV/AIDS and heightens the perception of risk leading to behavioral intention. This relationship was slightly weakened with the addition of socio-cultural variables in model 3. Farming symbolizes the traditional occupation of the people and an indicator of a probable adherence to tradition in the society. Farmers were significantly more likely not to report an intention to stop spouse sharing compared to non-farmers. However exposure to the intervention retains its predictive power so also are knowledge of HIV/AIDS and perception of risk. The addition of socio-economic and demographic variables in model 4 did not ameliorate the relationship between exposure,

acting through knowledge of HIV/AIDS, perception of risk of contracting HIV/AIDS and expressing an intention to stop spouse-sharing among the Okun.

Table 6: Odd ratios from logistic regression models measuring the effects of exposure to intervention on the likelihood of expressing intention to stop participation in spouse-sharing among the Okun 2000

Name of Variable	Categories	Model 1	Model 2	Model 3	Model 4
Exposure to the intervention	Exposed	14.9***	3.25***	3.40***	2.82**
	Not Exposed	1.00	1.00	1.00	1.00
Knowledge of STD including HIV/AIDS[xi]	High		2.94***	2.89**	2.57*
	Medium		1.00	1.00	1.00
	Low		0.99	0.99	0.66
Perception of risk	Yes		3.11***	3.06**	2.87**
	No		1.00	1.00	1.00
Type of family	Monogamy			1.29	1.37
	Polygamy			1.00	1.00
Occupation	Farming			0.59*	0.61*
	Non-farm			1.00	1.00
Residence	Urban			1.36	1.31
	Rural			1.00	1.00
Income category	High				1.57
	Low				1.00
Educational status	Some schooling				1.55
	No formal schooling				1.00
Radio exposure	Yes				1.41
	No				1.00
Sex	Male				1.20
	Female				1.00
Age group	≤ 35 years				0.74
Constant		-2.24	-2.58	-2.48	-2.81
-2 log likelihood		458.53	421.79	414.66	410.05

* significant at $p \leq 0.05$, **$p \leq 0.01$, ***$p \leq 0.001$.

DISCUSSION AND CONCLUSION

Limitations of the project

The intervention improved the knowledge of HIV/AIDS and perception of individuals' vulnerability to the disease in the community. Some respondents who reported involvement in spouse-sharing reported a discontinuation of the practice and significant number expressed an intention to stop the practice in the future. Conditions which enhance the practice such as polygamy and the social and health needs of the partners were displayed and questioned during the drama presentations. These conditions were not directly evaluated (e.g. conflicts, impotence, infertility and early marriage) by these study. This area has cultural implications and should be explored and programs developed to address the unmet needs of individuals and couples in the society.

It was also pointed out that the need for involvement in spouse-sharing is largely informed by loss of income by women due to widowhood, marriage to ailing and aging spouse who could no longer meet the need of the family. The need for material and financial support was the major reason the Okun people gave for participating in spouse sharing, (Osagbemi and Adepetu 2001). For intervention to have long lasting impact on sexual behavior the economic bottleneck must be addressed. The Okun women needed to be empowered vocationally and economically. An integrated intervention program that

addresses behavior change and economic opportunity for women will make a long lasting impact on the practice of spouse-sharing.

The impact of the intervention on economic improvement of women has not been directly evaluated here. However, one important message of the intervention is that women would only be available for sharing if the price is right. They were advised to take advantage of the employment and income-generating[xii] opportunities in the various government and non-government sponsored poverty alleviation programs in their localities. The impact of the intervention was not disaggregated by sex. This is considered a major limitation of the study given that the reproductive health of women is the most affected by the practice. This study focused mainly on spouse sharing and its potential in the transmission of HIV/AIDS there is the need for further research to provide a deeper understanding of the extent to which changes in adherence to cultural traditions and practices are affecting the various aspects of HIV/AIDS spread, treatment and care.

Knowledge Gained and Self-Reported Behavioral Changes

The intervention increased knowledge of HIV/AIDS and heightened the perception of contracting the disease, which probably led to the observed self-reported behavioral intentions and changes. The fact that spouse-sharing could predispose one to HIV/AIDS was unpopular with the people even among those who knew that HIV/AIDS could be transmitted through sexual intercourse. Those in doubt would want to separate extramarital sex involving sex workers in urban areas from that involving ale/alase in their rural locality. They argue that extramarital sex with ale or alase is normal, cultural and safe and can not be compared with extra marital sex with sex workers which spread diseases, HIV/AIDS and death[xiii]. It was a challenge explaining how spouse-sharing could spread HIV/AIDS in the community through sexual networking. They were told that their community is not insulated from the outside world. Their kits and kin travel to other towns and big cities and could be infected. Since the disease takes time to manifest, one man who is infected can introduce it to the family and the clan.

In conveying the message of sexual networking the drama performance was largely employed. A character actor was exposed to HIV/AIDS through a long chain of sexual networking that started from the village to the city and back to the village. Many people who felt safe prior to the intervention because their sex partners were their ale or alase probably began to see this form of extra marital sex differently. And those who might have thought they were insulated from HIV/AIDS infection because they were in culturally protected sexual relationship probably began to have the sense of vulnerability and increase perception of risk. This sense of vulnerability is particularly high and significantly so in the intervention communities than the non intervention communities. It is rather unfortunately that many people still held on to the belief that spouse-sharing as long as it is locally practice can not expose them to HIV/AIDS. Probably a more convincing way needed to be worked out to reach those segments of the population who are still in doubt.

An important task of the study was to promote self-protective practices among the Okun in the light of spouse-sharing which has been found to unduly expose the practitioners to STD experience (Osagbemi, et al., forthcoming). Of immediate concern was the promotion of efficacious preventive strategies particularly the use of condom among those currently involved in spouse sharing. To many respondents, the new message of the intervention is about HIV/AIDS and condom and knowledge of condom was completely new. The intervention did not increase condom use as much as the social marketing campaigns that focused on promoting condom, however the use of condom increased more rapidly in the intervention communities. The peer educators were charged with the responsibility of encouraging partners to use condom particularly in sexual encounters involving ale or alase. Given that condom use is new to many people its

continuing use by the early adopter will depend on its availability in the community after the intervention program.

One of the most challenging tasks of the intervention was how to persuade lovers to sever love relationship. Some of the lovers were childhood friends who have had offspring between them. In such cases where respondents reported that they had stop involvement in spouse-sharing the research team sense that they were probably reporting what they thought the research team wanted to know. The self-reported discontinuation of spouse-sharing and fewer partners in the intervention communities may probably be an indicator of intention which, had to do with the message of the intervention designed to raise perception of risk. Modification of sexual behavior involving the keeping of only one sex partner/non-participation in spouse sharing, apart from being the most effective prevention strategy against HIV/AIDS (Caldwell 1989), is a veritable strategy for the eventual eradication of the practice if more people can be made to adopt it. After all, the worrisome aspect of spouse sharing essentially lies in multiple sexual partnering.

One area where the intervention will probably make long lasting impact is in the future of spouse-sharing in the intervention communities. The messages of the intervention were both designed to discourage spouse-sharing among the current practitioners and prevent new entrants into the practice. The later will probably benefit more given that they are exposed early to information that will inform their choices concerning the practice early. This is indeed a possibility if those who expressed intention to stop in the community translate their intentions to action. Such population of those once involved in spouse sharing could act as role model and advocate for non practice of spouse sharing in their communities. The peer education program was meant to make the message of the intervention a subject of discussion in the community long after the research team has departed. If this happened, then the impact of the intervention would probably continue to be felt by the Okun people for a long time from now.

Entertainment education and interpersonal communication and traditional practices that can spread HIV/AIDS

The period of the intervention is relatively short. The question of whether culture can be changed within the short time frame for the intervention was a major challenge to the research team which informed the choice of multi-channel for the dissemination of the intervention messages. It is not possible to directly compare the impact of intervention programs designed to change sexual behavior elsewhere with our own, due to differences in the measures of outcome used and the focus. However, the proportion of the respondents who reported changing their behaviors was similar to other multimedia campaigns to promote reproductive health elsewhere (Kim et al., 2001).

The combination of drama play with peer health education in a colorful open day ceremony in a media-poor rural setting, like our study area, might have contributed to the impact of the intervention activities. The objective was not to isolate the effects of individual program on behavior change. Evaluations of multi-media reproductive health campaign designed to promote safer sex in other parts of Africa confirmed the advantage of combining several means of communication (Kane et al., 1998; Jato et al., 1999). The open day activities, the drama and the peer counseling complimented each other encouraged broad-based community discussions of the messages of the intervention (Osagbemi and Jegede 2001). The influence of the intervention program diffused widely to the entire community producing significant changes in attitudes and behaviors.

The intervention approaches are interactive, drew support from those affected directly and helped to remove suspicion, and presented alternative behaviors to the recipients in an atmosphere of mutual trust and understanding central to any decision at changing sexual behavior[xiv]. The eradication of cultural practices that could spread

HIV/AIDS among small tribal groups in several parts of Africa will benefit from community based multi channel information dissemination specifically focused on the problem.

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[i] *Alase* in Okun language literally means a cook. Food exchange between lovers is an important feature of the practice. The name alase probably derived from the fact that a man who maintains an affair with a kin's wife, in addition to sex enjoys the privilege of meals specially prepared by his lover. As part of the practice, the man provides the woman with food items twice or thrice a week, usually from his farm. Presently, those who are not farmers may occasionally give money in return for a permanent ration every evening from their lovers. Men refer to their partners as alase while women refer to theirs as ale.

[ii] The first scientific inquiry into the practice of spouse-sharing among the Okun was conducted in 1994 and several reasons were given to justify the practice, see Osagbemi, Sunmaila and Adelakun (1995).

[iii] Blood that does not rhyme will not be strong enough to fertilize a virgin womb. It will require the blood that rhythm to set the process in motion so that subsequent fertility may be easier.

[iv] Instances were cited where a quarrel between a husband and a wife could not be immediately settled because the husband was adamant, elderly members of the family or clan would secretly encourage young men to keep the wife of the adamant husband "occupied" until he changed his mind.

[v] The elderly participants repeatedly said in several discussion sessions that in the past children were conventionally considered the symbol of a successful practice of spouse-sharing, thus the need to beget children for oneself or for someone else, usually relatives, was the customary motive for spouse sharing. And since men who biologically fathered these children could not culturally claim them, these children merely served to remind them of the love they once shared with these women. Thus, men and women in spouse-sharing practices strove to cement their relationships through the children.

[vi] To calculate sample size the assumption was made that if Okun people's knowledge of HIV/AIDS was tested in the community they would know about 50% of basic facts about HIV/AIDS transmission, symptoms and prevention. Theoretically, the intervention is expected to improve knowledge by 20 to 25% to detect a difference of 22% following the intervention (with an alpha of 0.05%, power of 80% and attrition rate of 10%) 360 eligible respondents each would be required to participate in the two sets of communities -the intervention and non-intervention.

[vii] The 1995 study (Osagbemi et al, 1995) showed high rate of involvement in spouse-sharing in seven settlements (3 local government headquarters and 4 rural villages). Four of these settlements were selected and randomly assigned to the intervention and non-intervention settlements for the 1999 study.

[viii] Prevention of HIV/AIDS is a topical issue in Nigeria. President Olusegun Obasanjo in his presidential address to the nation on the World AIDS Day on 1 December 1999, acknowledged HIV/AIDS as one major public health problem in Nigeria. Consequently, as a first approach, the government has mounted radio and television propaganda to further inform the people about the reality of the disease in the country. While some of these messages may not directly address the issue of spouse sharing and the socio-cultural peculiarity of the Okun people, some of their messages on HIV/AIDS are no doubt informative. The radio is an important source of information among the people as revealed during the baseline survey. We encouraged those who understand English to listen to the radio program to learn more about STDs including HIV/AIDS. Thus, it is possible the intervention program is not the only way available to the Okun to learn about HIV/AIDS. Any observed changes may not be due entirely to the intervention packages.

([ix]) It was originally 19 questions on facts and fallacies designed to assess respondents' knowledge of STDs including HIV/AIDS. Four questions designed to test other STDs have been dropped and one question could not be compared due to poor responses in the post intervention survey.

[x] The future impact of the intervention on the discontinuation of spouse sharing among the general population would probably depend on those who expressed an intention to discontinue the practice now. In theories of human behavior, intention has long been viewed as important because it synthesizes the influence of an individual's background and attitudes and mediates between those characteristics and actual behavior (Ajzen and Fishbein 1969). The urge to stop the practice is probably rising in all the Okun communities, probably in response to the growing awareness of the threat of HIV/AIDS, which is receiving more publicity nation-wide.

[xi] Knowledge score was calculated for individuals from the 14 questions presented in Table 2. Those who scored between 0 – 5 were category as low, 6 – 10 as medium and 11 and above as high.

([xii]) Personal discussion with some women exposed to the program revealed that the intervention had influenced them to begin adopting its messages as well as to undertake activities expressing their heightened economic self-efficacy, such as starting a new business. A couple reported that: 'we have benefited a lot from the education through your program. Indeed, I and my husband are now actively

involved in discussion of reproductive health matters and this is affecting all areas of our marriage and our relationship."

[xiii] In the FGD aspect of the study someone ask "Do you mean to say these rural women are HIV positive, where would they get it from?" But the same person was aware of someone who has died of HIV/AIDS in the locality recently but argues the person got the disease from big town.

([xiv]) We did not consider the radio as an option because of its wider coverage, which in this context may be to our disadvantage. Prior to the intervention, our attention was drawn to a rejoinder in a national daily on the practice of spouse sharing titled the 'Okun people are not unfaithful'. In the rejoinder, some Lagos-based 'concerned Okun' accused a journalist of portraying their tribe in bad light and threatened collective court action against the journalist. They raised a lot of sentiment concerning what they considered a newspaper page discussion of their sexual behavior. We were interested in the health implications of the practice to the community and not in the moral issue of a right or a wrong sexual behavior. Since our objectives, if disseminated on air may be interpreted differently by different people, we dropped the idea of informing people by radio and settled for more interpersonal and interactive communication channels, which made for better acceptance of our program and the achievement of the study objectives.

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