Culture and HIV/AIDS in Africa: Promoting Reproductive Health in 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 relations between men and wives of their male kin. We identified and used features of spouse sharing that affect reproductive health 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/sexually transmitted diseases (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 increased knowledge of HIV/AIDS, perception of risk of contracting the disease and the intention to discontinue spouse sharing in the intervention communities. Those who perceived themselves at risk of contracting HIV/AIDS were more

likely to express intention to discontinue spouse sharing (odds ratio 2.87) than those who did not. It was recommended that future community-based interventions to address traditional practices that could transmit HIV/AIDS should address the aspects of the practice that could transmit the disease and actively involve the people to make impact.

Background

The Okun tribe, numbering about a million persons in the North-Central zone of Nigeria, accepts sexual relations between men and wives of their male kin in a practice called *ale/alase*.[1] The practice promotes sexual partnering and typifies sex with relatives by marriage in many communities in sub-Saharan Africa. In Nigeria, for instance, various studies of Yoruba culture in the South-West region have confirmed widespread extramarital sex in the form of spouse sharing (Ward 1937; Fadipe 1970; Caldwell, et al., 1991; Orubuloye et al. 1991; Orubuloye et al 1992; Messersmith 1994; Adegbola and Babalola 1999). See Kashamura (1973) for similar studies in other parts of Africa and Kakar (1990) in India. Some of these authors have concluded 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.

The intractable problem of HIV/AIDS in sub-Saharan Africa has created the need to understand sexual behavior and the practices that spread the infection as well as to experiment with programs that will halt its spread. Studies have documented sexual behaviors and traditional practices such as early marriage, "sugar daddy" syndrome, polygamy, extramarital sex and widow inheritance among others that contribute to the spread of HIV infection in different parts of the continent (Dominique and Calves 1997, UNESCO 1999, Longfield et al. 2004, Bankole et al. 2004). The continued existence of these practices in the community is probably responsible for the slow progress being recorded in the fight against this dreaded disease in many parts of sub-Saharan Africa, a slowness that is increasingly becoming of serious concern to all.

Although the literature is replete with information on behaviours and practices that contribute to the spread of HIV, few focused interventions to address these practices have been conducted. Organized primary prevention education programs have addressed general information about HIV/AIDS with the hope that those acculturated in other ways will be able to apply the knowledge and change their behaviour to avoid contracting the disease. Unfortunately, the most affected people are members of small ethnic groups in media-poor rural areas who have been neglected in major health promotion campaigns, or at best have been treated as part of larger ethic groups in their countries. What these groups probably need are specially packaged, community-based, participatory and interactive interventions that they can identify with and that respect their culture and beliefs.

Again, it is argued that the literature on HIV/AIDS prevention activities in sub-Saharan Africa is replete with case studies of best practices that are not based on research and that evaluations are too few and often poorly designed, or are too inconclusive to yield reliable guidance about program impact on which further interventions can be based (Grunseit and Kippax 1993, Kirby 1995, Hughes and McCauley 1998). The inadequacy of research findings concerning effectiveness of intervention and the growing problem of HIV/AIDS attributable to traditional practices combine to pose challenges to researchers, program managers and other stakeholders. This report documents the impact of a program designed to promote knowledge of HIV/AIDS, heighten people's perception of risk of the disease and discourage the practice of spouse sharing (sexual partnering) among the Okun people in the middle belt region of Nigeria.

Description of Program/Intervention

Previous studies conducted among the sexually active Okun people with support from the World Health Organization revealed that the practice of spouse sharing was high (63%), knowledge of sexually transmitted infections and HIV/AIDS was poor, and the people were still at the stage of denial of HIV/AIDS in their community (Osagbemi et al. 1995; Osagbemi and Adepetu 2001; Osagbemi and Jegede 2001). An intervention was planned to create awareness about HIV/AIDS,

promote self-protective practices and discourage the practice of spouse sharing among the Okun people. In several meetings with community members, it was decided that an Open Day with poster distribution, drama and peer education strategies would be adopted to convey the intervention messages, and their impact would be evaluated before considering other strategies.

Two sets of posters were distributed during the Open Day ceremony, each carrying short factual messages on HIV/AIDS and spouse sharing, with pictorial illustrations. The first displayed the message that HIV/AIDS is real, kills and has no cure. The second carried the message that HIV/AIDS could be contracted by having *ale/alase* or keeping multiple sex partners, using unsterilized needles and razor blades, and through contact with infected blood. It advised people to say "no" to spouse sharing and multiple sexual partnering. The Open Day, designed to entertain and educate in each settlement, attracted attention and drew participation from the local populace, including chiefs, traditional leaders and opinion leaders. It heightened HIV/AIDS awareness and provided the context for launching other intervention strategies – drama, peer education and posters. A detailed description of the planning, development and implementation of the different aspects of the program has been provided elsewhere (Osagbemi and Jegede 2001).

The drama presentation mirrored the practice of spouse sharing in the communities and provided the context for addressing many aspects of the practice that are considered capable of spreading HIV infection and/or are inimical to reproductive health. The play consisted of five parts, all designed to sensitize people on the risks of spouse sharing and the need to adopt self-protective behaviours in light of HIV/AIDS. Condom use was presented as a feasible option for prevention. Wrong treatment-seeking behaviours in the community were highlighted in specific scenes, and correct alternatives presented. At the end of each drama session, spectators were usually advised to visit the peer health educators (PHE), introduced before the drama, for more information.

The objective of the peer health education was to make the impact of the intervention more sustainable by repeating the intervention messages and discussing them among peers/groups in the communities after the program team may have departed. Peer educators (PEs) were credible volunteers from religious groups, age grades, schools and cooperative unions in the communities. Most importantly, those selected demonstrated strong interest and commitment to the program during training. At the end of training, each PE received an outline of the major findings of the previous studies in English and the interpretation in the local language, a primer on sexually transmitted diseases (STDs) and HIV/AIDS, a packet of condoms and 50 posters. Peer educators were given a modest task of counselling at least one person per day during the intervention period.

In the intervention communities, approximately 1700 posters in the local language were successfully distributed and four drama performances were staged between May 1999 and April 2000. The 80 trained PHEs (20 each in Ejuku and Ijowa and 40 in Isanlu) reported that they had educated 1840 persons within the period of the intervention. Intervention activities were conducted simultaneously, and the aim for activities was to complement and reinforce each other and facilitate community-wide discussion of the intervention messages. Over 95% of respondents reported exposure to at least one intervention activity, and about 87% reported exposure to two or more activities.

This study draws ideas from the step-to-behaviour-change framework, which synthesizes theories of communication and behaviour change into a practical model to guide reproductive health communication programs. The framework in turn derived its ideas from earlier works such as the health-belief-model, social-learning theory and the theory of reasoned action (Bandura 1977; Proschaska et al. 1997; Fishbein and Ajzen 1975). The step-to-behaviour framework describes five stages through which people pass as they change their behaviour: knowledge, approval, intention, practice and advocacy (Piotrow 1997; Kim et al. 2001). Effective communication campaigns determine the stage that their audience is at and focus their energy accordingly. At the time of this survey, HIV/AIDS information was just beginning to spread uniformly among the Okun and many people could not relate their behaviour to the new disease. The Okun study focused on the three earliest stages, when people learn key information about the disease and acquire skills for prevention, discuss campaign messages and express an intention for a new behaviour.

Methodology

The study used a quasi-experimental design involving two sets of Okun communities,[2] one with and the other without intervention. The intervention settlements comprised Isanlu – a local government headquarters, and two rural settlements – Ejuku and Ijowa. The non-intervention communities comprised Mopa – a local government headquarters, and two more rural villages – Effo and Ponyan. In 1996, the estimated populations of the studied settlements were: Isanlu – 14,446, Ejuku – 5644, Ijowa – 8216, Mopa – 10,405, Effo – 5790 and Ponyan – 7371 (National Population Commission Field Office, Isanlu).

Baseline and follow-up survey data were collected from 1018[3] sexually active Okun men aged 16 to 60 years and ever-married women aged 12 to 49 years in May 1999 and June 2000. The survey consisted of two parts: a knowledge, attitude, behaviour and practice (KABP) survey with the 1018 respondents, and a focus group discussion (FGD) among 86 informants (results of the FGD has been reported elsewhere; see Osagbemi and Jegede 2001).

In the program and control settlements, eligible respondents were reached through a random selection of census enumeration areas [EAs], followed by a random selection of households in the selected EAs. The questionnaire was administered in face-to-face interviews, and as much as possible, respondents and interviewers were matched together by sex. The surveys were conducted as approved by the University of Jos Institutional Review Board and the World Health Organization's Ethical Review Committee for research involving human subjects. Detailed sampling procedures have been described elsewhere (Osagbemi and Adepetu 2001; Osagbemi and Jegede 2001).

The questionnaire was divided into seven sections. Section 1 sought information on respondents' demographic and socio-economic characteristics including marriage and fertility history. Section 2 collected information on sexual practices in the locality and on the respondents' participation in the practice of spouse sharing, as well as whether respondents had any intention of stopping the practice. Section 3 examined respondents' awareness and experience of STDs, and Section 4 examined respondents' awareness and knowledge of HIV/AIDS and their sources of information. Sections 5 and 6 examined respondents' knowledge and practice of protective behaviour including the use of condom. Finally, Section 7 measured exposure to the intervention program and was included only in the post-intervention survey questionnaire.

It was not possible to measure directly all aspects of the steps-to-behaviour-change model using the questionnaire among the Okun; however, the people's intention measured by our study assumed the antecedents. In theories of human behaviour, 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 behaviour (Azjen and Fishbein 1969).

Expression of intention to stop spouse sharing was measured with a "yes" or "no" based on the response to the survey question asking whether a respondent intends to discontinue the practice of spouse sharing in the next six months. Knowledge score[4] was calculated for individual respondents from the 14 questions on the survey questionnaire on facts and misconceptions about HIV/AIDS. Psychometric analyses were performed on the items used to measure knowledge of HIV/AIDS among the Okun to ensure that they were reliable. The split-half reliability analysis shows that the correlation among the 14 items, the Spearman-Brown correlation coefficient and the Guttmann split-half correlation coefficients were 0.6243, 0.7135 and 0.7418, respectively. Not-too-high and not-too-low correlation coefficients of this nature are good indicators of items reliability (Nunnally, 1978). Those who scored 0–5 were categorized as low, 6–10 as medium and 11 and above as high. Perception of risk was also measured with a "yes" or "no" response to the question of whether a respondent considered herself or himself to be personally at risk of contracting HIV infection.

Data were collected from the same respondents before and after the intervention. This is an extremely powerful design that gives us exact estimates of behaviour change, because we track the same person over one year and this allows us meaningful comparisons between the intervention and control groups. The background and socio-demographic characteristics of respondents and exposure to the intervention were recoded into dichotomous variables (see Table 2). A generalized

logistic regression model for dichotomous variables was fitted into the dataset to estimate the odds ratios of a respondent's expressing an intention to stop the practice of spouse sharing from exposure to our program, knowledge of HIV/AIDS and perception of risk of contracting HIV infection, while controlling for the background characteristics of the respondents and the interaction between exposure to the program and background characteristics.

Results

Table 1 contains information on background characteristics of the participants in the program. The same respondents in the intervention communities (n = 588) and non-intervention communities (n = 430) completed a post-intervention survey questionnaire identical in content to the pre-test questionnaire.

Table 1. Percentage 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
Type of family	Polygamy		46.1	46.5	46.0
	Monogamy		53.9	53.5	54.0

The number of men and women was approximately equal; slightly over half reside in semi-urban areas and are less than 35 years old. About one third have no formal education, but the majority of participants listen to the radio at least once a week. Only one third were engaged in non-farming activities, and almost half had a polygamous family background. Respondents were similar in a number of demographic and socio-economic characteristics, except that the intervention group was more likely to reside in the urban area (local government headquarters) and was more educated.

Bivariate Analysis

The intervention and control groups were compared along a number of intermediate outcomes – knowledge of HIV/AIDS, perception of risk and expression of intention to discontinue the practice of spouse sharing directly. These intermediate outcomes were believed to be positively influenced by the program after one year among the Okun people. Table 2 reveals that knowledge of HIV/AIDS increased between June 1999 and May 2000 in the general population but was more dramatic in communities where we conducted our study than in non-intervention communities. The intervention group scored higher and the differences were large and significant on all 14 items designed to test the knowledge of transmission and prevention of HIV/AIDS. The knowledge that women or men can contract and spread HIV increased significantly in both intervention and non-intervention settlements.

Table 2. Percentage distribution of respondents who answered correctly to the facts and fallacies about HIV/AIDS, according to survey year

S/No	Facts 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 the 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 cannot 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 $p \leq .001$.

Table 3 shows that more people were probably aware of the risk of HIV/AIDS in the community in 2000 than in 1999. About half of the population considered themselves at risk of contracting HIV/AIDS in 1999 and two thirds in 2000 in the intervention group, compared with slightly less

than half in 1999 and slightly more than half in 2000 in the control group. The increase in the intervention group was large and significant between 1999 and 2000 ($X^2 = 97.5$, $p \leq .001$).

Table 3. 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 $p \leq .001$.

According to Table 4, less than 5% of sampled respondents who practised spouse sharing in 1999 expressed intentions to stop, compared with about 36% in this category of respondents in 2000. This percentage increase was higher among respondents in intervention communities (53.2%) than in non-intervention communities (11.9%).

Table 4. Percentage 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

Expressed an Intention in Next 12 Months to Stop Spouse Sharing	All***		Intervention Communities***		Non-intervention Communities**	
	1999	2000	1999	2000	1999	2000
Expressed	4.91 (33)	36.44 (207)	4.9 (20)	53.2 (159)	4.90 (13)	11.9(32)
Not expressed	95.09 (639)	63.56 (361)	95.1(385)	46.8 (108)	95.1(254)	88.1(237)
Total	100 (672)	100 (568)	100 (405)	100 (299)	100 (267)	100 (269)

**Significant at $p \leq .05$, ***Significant at $p \leq .001$.

Multivariate Analysis

Table 5 contains the results of the logistic regression on the likelihood of expressing an intention to stop the *ale* or *alase* practice of spouse sharing. 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 of intentions to stop spouse sharing. We assumed that if the exposure–intention relationship is still significant, the evidence could be reasonably assumed to infer the effect of our program.

Table 5. Odds ratio 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 HIV/AIDS	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 $p \leq .05$; ** $p \leq .01$; ***$p \leq .001$.

In Model 1, the odds ratio 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 not exposed. In Model 2, the addition of knowledge of HIV/AIDS and the perception of risk of contracting the disease ameliorated dramatically the relationship between exposure and intention to discontinue spouse sharing.

This confirms the hypothesis that exposure will increase knowledge of HIV/AIDS and heightens the perception of risk leading to expression of intention to stop spouse sharing among the Okun.

This relationship between exposure, acting through knowledge, perception of risk of contracting HIV and expression of intention to stop spouse sharing among the Okun was slightly weakened with the addition of socio-cultural variables in Model 3. The addition of education, media exposure and demographic attributes like age and sex 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

Discussion

This paper describes the impact of a community-based HIV/AIDS awareness program to discourage the practice of spouse sharing among the Okun people. It was implemented in three intervention and three control settlements in the middle belt region of Nigeria. Quantitative data from the respondents were used to examine the correlates of expressing an intention to stop the practice of spouse sharing. Two rounds of surveys involved the same respondents, one before and the other immediately after the intervention, which allows direct comparison of the data. Intervention activities took place at intervals, enabling participants to reflect on the knowledge gained. Some of the activities were repeated in the community to reinforce earlier information and promote knowledge retention.

We did not control for the conditions or reasons generally given for the practice of spouse sharing, such as polygamy, widowhood, early marriage, infertility and impotence. The quantitative survey did not directly capture this data in a manner amenable to analysis. These conditions may have implications for individuals' and couples' vulnerability to the practice of spouse sharing and the ability to discontinue involvement, particularly for women (Osagbemi and Adepetu 2001). Analysis that includes these conditions will shed more light on the interplay between these socio-economic conditions, vulnerability to spouse sharing, HIV/AIDS and the probability of eradicating the practice in the society.

The intervention and control groups were compared along a number of intermediate outcomes – knowledge of HIV/AIDS, perception of risk and expression of intention to discontinue spouse sharing directly. These intermediate outcomes were positively influenced by the program after one year. Knowledge of HIV/AIDS increased significantly in the communities where we conducted our studies compared with other communities. The intervention group scored higher and the differences were large and significant on all 14 items testing knowledge of transmission and prevention of HIV/AIDS between 1999 and 2000. In the non-intervention communities, only the knowledge that HIV/AIDS is not a disease of a particular sex (male or female) increased significantly. In both communities the notion held before the intervention that HIV/AIDS is a disease contracted from women is generally changing, and this a good development for prevention of the disease in the community.

People in the intervention communities were more aware or probably more convinced in 2000 than in 1999 that the practice of spouse sharing (*ale/alase*) can facilitate the spread of HIV/AIDS in the community. The highest percentage point difference of 44.6% recorded on this particular issue in the intervention communities undoubtedly stems from the improve knowledge of HIV recorded among this group. It indicates that the Okun people are beginning to relate their behaviour to the disease. This is further confirmed by the findings that whereas in 1999 about half of the population considered themselves at risk for contracting HIV/AIDS, in 2000 two thirds of the intervention group considered themselves at risk. Only slightly more than half of the control group saw themselves at risk in 2000.

The increase in knowledge about HIV transmission and the perception of risk of contracting the disease have combined to create an intention to discontinue spouse sharing. Less than 5% of the sampled respondents who practised spouse sharing in 1999 expressed intentions to stop, compared with about 36% in 2000. This percentage increase was higher among respondents in intervention communities (53.2%) than in non-intervention communities (11.9%). The intervention messages

stating that HIV/AIDS – *Jodimole* – is real in Okun land, is sexually transmitted, and *ale* or *alase* can facilitate its spread, probably heightened the individual's sense of vulnerability and perception of risk in the community.

When respondents' background characteristics were controlled for in a multivariate analysis shown in Table 5, the intervention increased knowledge of HIV/AIDS and heightened the perception of risk, leading to expressions of intention to stop spouse sharing. among the Okun. The relationship between exposure to the intervention, knowledge of HIV/AIDS, perception of risk of contracting HIV and expression of intentions to stop the practice of spouse sharing was slightly weakened with the addition of socio-cultural variables in Model 3. Farmers were significantly less likely to express intentions to discontinue spouse sharing. Farming symbolizes the traditional occupation of the people and is an indicator of a probable adherence to tradition in the society. This finding is important given the central role farmers play in the economy of these rural communities. Special attention must focus on taking the message of HIV to farmers so that they can change their behaviour and improve their sexual and reproductive health.

The modest success recorded by our program is probably due to the colourful Open Day ceremony, the play and the peer health education program meant to complement each other and organized with active participation of the people. Over 80% of respondents reported exposure to the three major activities, probably because of the publicity given to the program, which used the local traditional channel of information dissemination (Osagbemi and Jegede 2001). Although the effects of each program on outcome variables were not isolated, studies in other parts of Africa confirm the advantage of combining several means of communication. Different audiences, with varied backgrounds, respond to different appeals (Kane et al. 1998; Jato et al. 1999; Kim et al. 2001).

HIV/AIDS in sub-Saharan Africa has not spread in a social or cultural vacuum (Caldwell et al. 1989, Bankole et al. 2004). Thus, tackling cultural practices that could spread HIV/AIDS among populations, particularly in small tribal groups in several parts of Africa, will probably benefit from a community-based, culturally sensitive, multi-channel program of information dissemination specifically focused on the problem itself, with the people as active partners. The whole intervention and its messages probably addressed an aspect of HIV transmission (multiple sexual partnering) that found meaning in the culture of the Okun people in the form of spouse sharing and that the people could easily identify with.

The future impact of the intervention on the discontinuation of spouse sharing among the general population will probably depend on those who expressed an intention to discontinue the practice now. In theories of human behaviour, 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 behaviour (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 nationwide publicity. The government is mounting radio and television propaganda to further inform people about the reality of the disease in the country. While some of these messages on HIV/AIDS may not directly address the issue of spouse sharing and the socio-cultural peculiarity of the Okun people, some are no doubt informative.

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Notes

1. *Alase* in the 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 three times 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*.

2. The 1995 study (Osagbemi et al 1995) showed a high rate of involvement in spouse sharing in seven settlements (three local government headquarters and four rural villages). Four of these settlements were selected and randomly assigned to the intervention and non-intervention settlements for the 1999 study.

3. To calculate sample size, the assumption was made that if the 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.

4. Knowledge score was calculated for individuals based on the 14 test items presented in Table 2. Psychometric analyses were performed on the 14 items to ensure that they were reliable (Nunnally 1978). The ability of a test item to obtain similar results from the same individuals under similar circumstances can be measured with a test, re-test comparison of scores or by measuring split-half consistencies in scores. The split-half reliability analysis shows that the correlation among the 14 items, the Spearman-Brown correlation coefficient and the Guttman split-half correlation coefficients were 0.4221, 0.562 and 0.5734, respectively. According to Palumbo (1969), not-too-high and not-too-low correlation coefficients of this nature are a good indicator of item reliability. Thereafter, individual scores were recoded. Those who scored 0–5 were categorized as low, 6–10 as medium, and 11 and above as high.

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