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A note on suspect practices during the AIDS epidemic: vaginal drying and scarification in southwest Nigeria*

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Abstract

Vaginal drying and scarification have been reported as possible risk factors. Published research on the former has been confined to East and Middle Africa. This paper reports on research in West Africa employing a survey of 1,976 females in southwest Nigeria, where they reported on their own vaginal drying, the scarification of their sons, and their participation in blood oaths. It was concluded that vaginal drying is not a risk-factor for AIDS in southwest Nigeria, and probably more broadly in West Africa, that scarification may be in the few cases when group scarification is practised, and that the practice of blood oaths probably puts those involved in danger.

The severity of the sub-Saharan Africa AIDS epidemic has led to a search in the region for cultural practices that might facilitate the transmission of HIV either through rendering the vaginal wall thinner or damaged or by breaking the body's skin in such a way as to make the exchange of blood more likely.

Research on vaginal drying has mostly been reported for East, Southern and Middle Africa, while there has been only limited reporting of scarification and similar practices. This note adds to the information available by reporting on Southwest Nigeria.

The Southwest Nigerian study

The opportunity was taken to add questions to a large study in Southwest Nigeria on related matters pertinent to AIDS: male sexual behaviour (Orubuloye, Caldwell and Caldwell 1995a,b), and male and female circumcision (Caldwell, Orubuloye and Caldwell 1995c). The questions reported here were asked only of female respondents.

A sample survey, with some in-depth questions, was conducted in 1994-95 in three predominantly Yoruba states of Southwest Nigeria, Ondo State, Oyo State and Lagos State. In each, one urban area was sampled, Ado Ekiti, Ibadan and Badagry respectively. Because of the very limited rural population in Lagos State, rural surveys were only carried out in Ondo State, where the Ekiti West and Ekiti Southwest Local Government Areas were sampled and in Oyo State where Egbeda Local Government Area was chosen. A total of

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1,749 males and 1,976 females were interviewed, although only the latter are reported upon here.

The towns and rural areas chosen were selected so as to examine change. Both the towns and the local government areas chosen have an unusually high level of educational institutions even for this advanced part of the country. The female respondents were 88 per cent Yoruba with an average age around 35 years. Just over half had experienced some secondary education and most of these women worked in the non-traditional sector of the economy. However, 54 per cent were either farmers or traders. Almost 70 per cent were Christian, 30 per cent Muslim, and only one per cent described themselves as being adherents of the traditional religion. In terms of marital status, 24 per cent were not in a union at the time of the survey, 45 per cent were in monogamous marriages and 31 per cent were in polygynous ones. This level of polygyny, namely 41 per cent of currently married women having co-wives, is typical of the area and of much of West Africa. In terms of ethnicity and religion the sample approximated census and survey counts.

Vaginal drying and tightening

Vaginal drying and tightening has been widely reported in East, Southern and Middle Africa (Brown, Ayowa and Brown 1993; Runganga, Pitts and McMaster 1992; Caldwell and Caldwell 1993:829-832). Its most common purpose has been reported to be the male preference for such drying before sexual intercourse. It is probable that a high level of genital infections is the primary cause of vaginal wetness, and high parities cause vaginal looseness. AIDS researchers became interested in vaginal drying when it was established that substances were used which might change the vaginal mucosa and that leaves, rags and other abrasive materials were used for cleaning in such a way that the vaginal wall might be scratched. One common drying agent was the astringent, alum, which is widely used in the West for drying the blood produced by shaving cuts. Since the Nigerian research was undertaken a study has been reported of 329 women attending an STD clinic in Lusaka, Zambia (Sandala et al. 1995). Fifty-eight per cent were seropositive, one-third pushed cloths or leaves into their vaginas for drying and one-tenth of this group had swollen or peeling vaginal surfaces as a result, but no association could be shown between drying and infection with AIDS.

In the Southwest Nigerian study nearly all women reported that they cleaned and dried their vaginas before sexual activity, but none that they used tightening agents. The cleaning was largely external and there was very little internal douching. They reported that the cleansing was needed to prevent infection resulting from intercourse and to reduce the level of vaginal odour. The emphasis on reducing odour rose with education and other socio-economic indices and was greater in urban areas. This presumably demonstrated both greater fastidiousness and easier access to piped water and other facilities. Nevertheless, it may also have shown that these women were more sceptical of the thesis that such cleaning and drying could protect them from infection.

Nearly all the elite and most urban women said that the cleaning and drying was for the benefit of both sexual partners. In rural areas, one-third of women said that they carried out these procedures only for the benefit of their male partners and to meet their demands. This is evidence of a situation which is clearly passing but where not long ago the male demand was paramount. Nine out of ten men in both urban and rural areas, with little socio-economic differentiation, still expect such cleaning. When asked what happened if the husbands knew or suspected that such cleaning had not been done only one-tenth of the female respondents said that sexual intercourse would go straight ahead. One-third said that their male partner would just give up the idea of having sex at that time, while the rest reported that he would scold them and tell them to clean themselves. Husbands were less likely to make such complaints or to terminate sexual activity among the urban elite but this probably

demonstrates little more than lower levels of vaginal infection and higher levels of vaginal hygiene among their wives or other female companions.

The major finding in this study is set out in Table 1. That finding is that there is very little use of harmful substances or objects in the washing and drying. A few rural women do use cloth and this might scratch or might not be clean. But there is no parallel to the dangerous cleaning methods reported for other parts of Africa. It is possible that the Southwest Nigerian pattern is widespread in West Africa and that this accounts for the lack of West African research reports on the matter. Possibly there is some cause for concern among the one-sixth of women who report employing antiseptic solutions, especially as most of them do so two or three times a day. More generally, there may be concern for the higher frequency of internal washing practised by these women.

Table 1
Vaginal cleaning and drying (1,976 female respondents)

	Urban respondents (N=1,073)	**Rural respondents (N=903)**
Frequency of cleaning and drying (%)		
Rarely or not regularly	8	6
Once daily	27	25
Twice daily	45	39
Three times daily	5	15
More often	15	15
Methods of cleaning (%)		
Soap and water	63	50
Antiseptic solution	16	12
Water only	9	18
Vaginal cream	1	2
Other (cloth etc)	1	3
No response	2	9
Does not clean regularly	8	6
Total	100	100

Once these matters would have been taught as a preparation for marriage, usually formally as part of puberty rituals. Nowadays, half the women claim to have been given no instruction but to have followed their own commonsense. Nearly all the rest were instructed by parents or relatives, mostly the former in towns, while in rural areas, where there is still a concept of the appropriate relatives for such a task (maternal grandmothers or aunts usually), two-fifths of the instruction was given by other relatives.

Scarification

Scarification is making incisions in the skin. Traditionally for protective purposes, it was universal among Yoruba males of southwest Nigeria. This is still generally true, for, among respondents whose children were regarded as old enough for scarification, 95 per cent of parents had had it performed.

Scarification can lead to very considerable bleeding, and has aroused the interest of AIDS researchers especially when group scarification takes place using the same instrument.

Perhaps the most interesting finding from the research was the evidence that scarification was showing little sign of decline. This was established partly by the continuing high level of the practice and partly by the almost complete lack of socio-economic differentials in its

practice. The only differences — and these were not statistically significant — were that every adherent of traditional religion carried out the practice, and that only 93 per cent of the secondary educated urban elite under 35 years of age had carried it out compared with 96 per cent of the rest of the population.

Scarification is almost entirely practised for protection from disease, ill-fortune or witchcraft and other evil forces. Nearly all rural respondents answered immediately in these terms, as did 92 per cent of the urban respondents. The remaining eight per cent claim to do it simply because it is cultural or traditional.

The key responses which indicate whether scarification could increase the risk of HIV transmission are given in Table 2.

Table 2
Scarification of sons (1,425 mothers of sons who have reached the suitable age)

	Urban	Rural
When was it carried out? (%)		
Before going to school	8	16
Before going to new places	5	5
At festivals	11	6
When needed or there is a divine sign	9	17
No particular time, no response	67	56
	100	100
Who did the scarification? (%)		
Traditional specialist	8	22
Traditional doctor	32	21
Other healers[a]	52	50
Others (relatives etc)	8	7
Total	100	100

[a]Herbalists and some persons claiming contact with the modern health system (nurses, dispensers etc.)

There are several important findings in Table 2. The first is that less than one-tenth of scarification is now associated with festivals or rituals, a situation which must reduce the chance of rapid, successive scarification. The second is that there is probably still a substantial amount of scarification done to meet crises, and this could well mean more than one family member being done at the same time with a raised risk of intra-family HIV transmission.

The medicalization of traditional practices, which we have already reported in the case of circumcision (Caldwell, Orubuloye and Caldwell 1995), may also be taking place to a limited extent with scarification. Many of these procedures are now carried out by persons claiming contact with the modern health system, some presumably in hygienic conditions and with the sterilization of instruments. Three-quarters of the scarifications performed on the sons of the modern, urban elite are done in this way. The danger of group scarification is presumably largely confined to traditional practitioners.

Blood oaths

Solemn agreements were signified in the days before written documents by the participants cutting themselves and sucking each other's blood. Clearly the risk of HIV transmission would be high when people had cut lips or mouth sores. We heard persistently that such oaths were still performed and accordingly we directed questions to the practice. The oaths

increasingly became part of the initiation ceremonies of secret cults and of criminal organizations. They are practised among secret societies in universities and schools and such societies are becoming more numerous.

Surprisingly, eight per cent of rural respondents and five per cent of urban respondents reported that they had participated in at least one contract of this type, and the levels were probably higher among their husbands. Participation appeared to decline with urban residence and steeply with education and other socio-economic indices but as the cults require an oath of secrecy this information must be suspect. As a form of agreement it remains mainly a practice of the illiterate and is their form of documentation. The scars remain. In addition there is a religious element in that this ritualistic agreement is made in a way that is noted by the ancestors and the gods.

Summary

In Southwest Nigeria, vaginal cleaning and drying is of a type that is unlikely to augment the AIDS epidemic. There is no vaginal tightening. In contrast, scarification on the existing scale must present some danger. This statement should be qualified by noting that the proportion of group scarifications is probably small, and that half of all scarification is now carried out in the modern medical sector. Blood oaths are still practised by some people, and would appear to be exceedingly dangerous in terms of potential HIV transmission.

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