HIV protection and screening in women in New Caledonia

Abstract: The paper examines HIV data in a Violence Against Women survey conducted in New Caledonia. A representative sample of 1012 women aged 18 to 54 were interviewed. It describes the effect on HIV prevention behavior of knowing someone who is HIV+ and examines condom use and other indicators of unprotected sexual behavior such as unwanted pregnancies and abortion. It also looks at HIV screening, both during antenatal care and at the woman's own initiative. Despite improved prevention behavior among young Islanders (18-24), the results indicate the persistence of strong inequalities among ethnic communities in HIV information and protection and in reproductive health. In New Caledonia to day, health inequity in these areas still clearly disadvantage the indigenous Melanesian and Polynesian women too, compared to European women. (Pacific Health Dialog 2003 Vol.10 (2); pg 10-15)

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Introduction

In New Caledonia, with a population estimated at 215,000 inhabitants, 243 cases of HIV/AIDS were identified by screening between 1986 and April 2002 and another 17 (for a total of 260) by August 2003 (source DASS-NC). Although the prevalence of HIV infection appears low (0.66 per thousand among recent parturients tested[1], the relative proportions of heterosexual infection and of women among the persons infected have risen continuously over the years. At the end of 2001, the sex ratio of active cases was 2 men for every woman. The ethnic distribution was 68% persons of European descent (hereafter, Europeans), 15% Melanesians, 10% Polynesians, 5% "others" and 2% Asians[2], although the last census indicated that the general population included 44% Melanesians, 34% Europeans, 12% Polynesians (Tahitians and Wallisians or Futunians), 5% Asians and 5% "other". The Melanesians live mainly in the Northern and island provinces (in rural areas), while the European and other communities reside especially in the Southern province, where the Noumea metropolitan area, the only real urbanized area, is home to 60% of the population. Each province has independent and complete responsibility for health care in its region.

This study of the health, living conditions and safety of Caledonian women was the first study in the general population of women to seek information about their reproductive health and sexual behavior; its principal objective, however, was to measure violence against women in New Caledonia. It examined HIV infection in terms of safe sex practices, mainly condom use, in couples and with new partners; it also looked at recourse to screening and its circumstances.

Methods

The data were collected in face-to-face interviews, based on a standardized questionnaire; 1012 women aged 18 to 54 were interviewed from November 2002 through August 2003. The sample random, stratified according to age (based on data from the Institute of Statistics and Economic Studies), was based upon the electoral rolls, which are a reliable source in New Caledonia because of the high voter registration rates. Slightly more than half the questionnaires (529) were completed at the respondent's home after ensuring that she was alone there; the others (483) were conducted at a health center or another site chosen by the respondent.

Only 7.9% of the women contacted refused to participate in the survey (5% said no and 2.9% did not keep their appointment). Even fewer (less than 1%) left an interview already underway.

Our sample included 44% Melanesians, 33% Europeans, 13% Polynesians, 3% Asians, 6% other and 1% who refused to respond to the question about their ethnic group.

Of the women defining themselves as "other", 80% were born in New Caledonia and live in the Noumea metropolitan area. This heterogeneous category may

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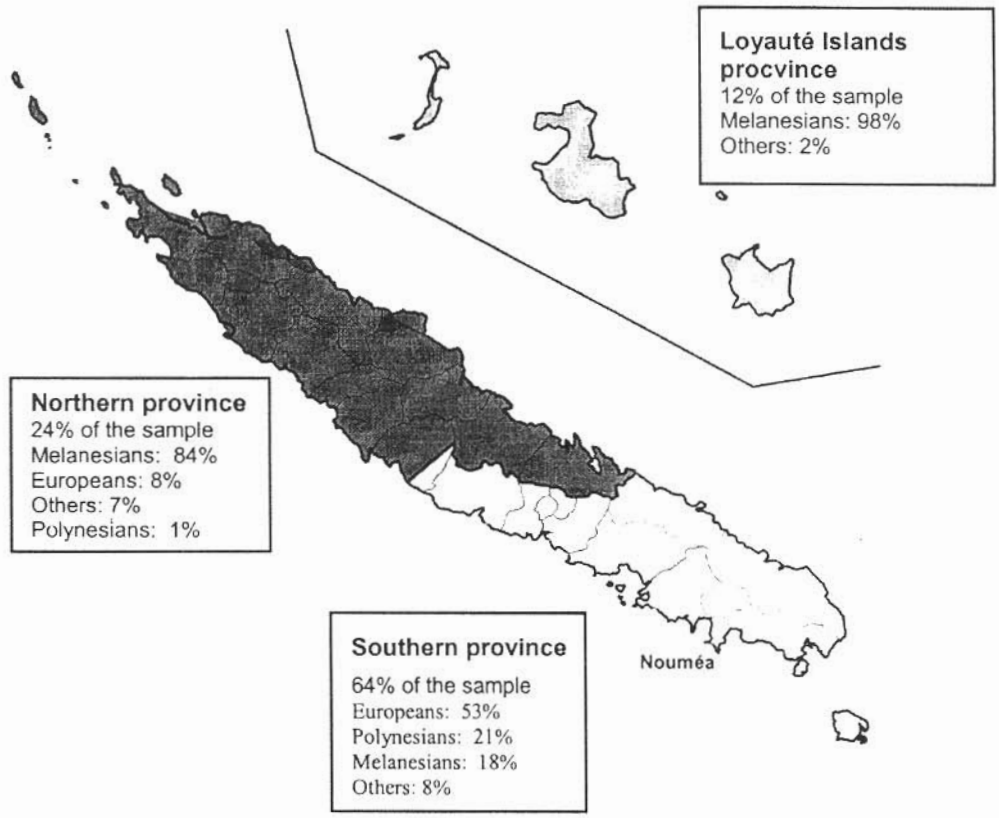
correspond to a second generation of immigrants whose parents were not European or be a way of expressing ethnic mixture (metissage). For statistical reasons and because they share common social and demographic characteristics, we have combined the 1% of women who refused to respond to the question about ethnic group with the "other" category. For the same reasons we have added to those of European descent the Asians (Indonesians and Vietnamese) from families living in New Caledonia for two or three generations.

those living in the city to know someone with HIV infection or AIDS.

The probability of knowing someone who is HIV+ increases regularly with educational level and with age, rising from 5.5% of those aged 18-24 years to 8.5% of those 25-34 years, 14.3% of those 35-44 and 15.66% of those 45-54.

Figure 1: Distribution of respondents by province and by ethnic group



Results

Overall 11% of all the women questioned (n=1 012) reported that they know or had known someone who was seropositive for HIV or had AIDS. This percentage differed substantially by ethnic group and province of residence. Only 4.5% of the Melanesians and 6.5% of the Polynesians are or were acquaintance with an HIV patient, while 18.5% of the Europeans and 20% of the "others" were. Women in the Northern Province (where Melanesians account for 84% of our sample) have the least contact with HIV: only 2.5%. The ethnic factor is nonetheless modulated by the data on place of residence. Of the Melanesians living in the Noumea metropolitan area, 10% know someone seropositive or with AIDS while only 3.5% of those in rural areas (northern, rural southern and island provinces) do. Europeans living in rural areas are one third as likely as

Using condoms

Among the women with any sexual activity (n=939), nearly half (48%) had used a condom at some point in their life. Those most familiar with it were those with the highest educational levels (76% of those with any post-secondary schooling) and the youngest (82% of those 18-24 years); lifetime condom use decreased significantly with age, but we note that the drop after the age of 25 years is much more marked among Melanesians and Polynesians than among the Europeans and the "others". Generally, only 30% of the Polynesians had used a condom and 42% of the Melanesians; corresponding figures for the "others" were 53% and for Europeans, 62%. Among the Melanesians, those living in the islands were least familiar with condoms (33%) and those in the rural south had used it most (50%). We note that in the rural south, barely more

Europeans (53%) than Melanesians had already used it. Condom use was also correlated with religion. Globally the women who reported a religion used condoms less than those who did not have a religion (44% versus 68%). Its use decreased with regularity of religious practice among Catholics (n=522) but not Protestants (n=178). Finally 58% of those close to someone HIV+ have used a condom compared with 47% of the others.

Of the women who have had a new partner during the past 12 months (n=89), 48% used no protection and 27% neither discussed the risk nor used a condom with the new partner, although half had done so in previous relationships. Of those who did not use a condom, 45% nonetheless discussed it first. Most (15 of 20) reported that they did not use a condom because they reached a decision together with their new partner, the others because their negotiations failed.

Overall, more than half of the women who have had a new partner (52%) did use condoms, and use was highest among the 18-24 year-olds (62%). One third of those who did use a condom did not discuss HIV with their partner first.

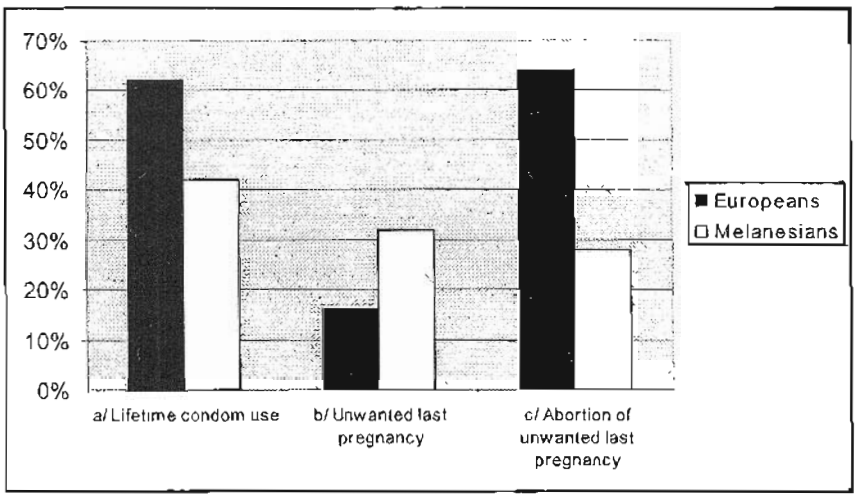
Of the Melanesians with a new partner, only 38% used condoms, and this proportion was 72% among European (the numbers of Polynesians and "others" in this category were too small to calculate proportions). Nonetheless the young Melanesians, those younger than 25 years, used condoms more than twice as often as their older counterparts. Age was much less determinant a factor among Europeans.

Moreover, 4% of the women who reported sexual relations over the past 12 months (n=827) used condoms for contraception: they represents 7% of the women using contraception. Most (57%) were younger than 25 years. The condom nonetheless trails the birth control pill in this age group: 63% of the contraceptive users younger than 25 years took the pill while 17% used condoms (and 22% of those younger than 20 years, with the same proportion of pill-users).

Unprotected sex and the risk of HIV exposure were also revealed by the lack of contraception, common in New Caledonia, where one quarter of the women who had been pregnant (n=767) reported that their last pregnancy had been unwanted. This included 44% of the 18-24 year-olds who had been pregnant. Twice as many Melanesians (32 %) as Europeans (16%) reported that their last pregnancy was unwanted; results for "others" (25%) and Polynesians (19%) fall between these extremes. Melanesians account for 79% of the unwanted pregnancies among the 18-24 year-olds. Regardless of their age, 18% of the Melanesian but only 2% of the Europeans who wanted an abortion were unable to obtain one.

Of the Europeans with unwanted pregnancies, 64% had abortions, compared with 28% of the Melanesians. The numbers of Polynesians and "others" in this situation are too low to calculate percentages. In all, only 36% of the women whose last pregnancy was unwanted had an abortion. This proportion reached 47% among those younger than 25 years, the age group in which abortions were most frequent: two thirds of the women who had had at least one were younger than 25 years at the time of the first. Among those 18-24 years at the time of the survey, 11% had already had one or more abortions.

Figure 2: Condom use, unwanted pregnancy, and abortion among Europeans and Melanesians



a/ among women with any lifetime sexual activity (European n= 347 / Melanesians n= 407)
b/ among women who have ever been pregnant (Europeans n= 281 / Melanesians n= 337)
c/ among women whose last pregnancy was unwanted (Europeans n= 44 / Melanesians n= 108)

Screening

Of the women with any sexual activity, 51% had undergone an HIV screening test (23.4% one test, 16.5% two and 10.8% three or more). The vast majority of women screened were seronegative (89.1%) and none reported that they were seropositive. Only 1.7% (8) were uncertain of their status at the time of the survey and 0.6% (3) did not wish to state their serologic status. Accordingly 8.6%, that is, 41 women, were tested but did not know the result. Only 0.6 % (3), pregnant at the time of the survey, could have been awaiting the results. We can only conclude that 8% of the women who should have known their results did not.

The largest group of tests (the only or last test) was conducted as part of prenatal care (55%). There is nonetheless a substantial discrepancy between the number of women who have been pregnant since the systematic offer of testing during pregnancy began (1994) and the number who reported having been tested. One third of the women whose last pregnancy occurred after 1994 reported they had never been tested. This proportion is highest in the islands and northern provinces: 53% of the women in the islands, 45% of those from the northern province and 22% of those from the southern province reported never having had an HIV screening test. In the south, this is more frequent among the Melanesians (35%) and the Polynesians (31%) than among the "others" (24%) and the Europeans (14%).

Roughly one quarter (24%, n=115) of the women who have been tested affirmatively sought an HIV test, that is, 12% of the women with any sexual activity. In all, 63% took these affirmative steps at their own initiative and the rest on their physician's advice. No respondent sought screening at her partner's request. Half the women reported seeking testing for a "check-up"; the other half reported their reasons as equally divided among "had taken risks", "to begin unprotected relations" and "no particular reason"; testing for blood transfusion has become relatively unimportant. In the south, the only province inhabited by all ethnic groups, 19% of the European and 18% of the others had voluntarily sought testing, but only 12% of the Melanesians and 4% of the Polynesians.

Generally, voluntary testing at the respondent's own initiative was most common among Europeans, women with a high educational level, with high income, with no stable partner, and those who had a new partner within the past 12 months. Their frequency does not vary significantly by age group.

On the other hand, the women with an intermediate educational level, an intermediate income, living in a couple, and not having had a new partner during the year were tested most often through routine medical procedures, prenatal care in particular.
Finally, those who reported never being tested were most often Melanesian, or had a low educational level, or lived in rural areas of the northern and islands provinces.

Table 1: Characteristics of testing (for the last test) among women with sexual relations, according to their social characteristics

	Personal initiative n=72	Other type of test (follow-up medical, other request) n=405	No test n=462	
Ethnic group				
Melanesians	5	30	65	
Polynesians	3	48	49	**p < .0001**
Europeans	12	55	33	
Other	12	45	43	
Province of residence				
South	9	51	40	
North	4	32	64	**p < 0.0001**
Islands	5	27	68	
Educational level				
Non or completed elementary school	4	32	64	**p < 0.0001**
Completed middle school	9	42	49	
Completed secondary school	9	60	31	
University	15	65	20	
Monthly income				
nothing to 669 €	6	36	58	
670 - 1339 €	7	40	53	
more than 1340 €	13	63	24	**p < 0.0001**
refused to respond	7	37	56	
Marital (or living) status				
lives with a partner	5	51	44	
In a couple, not cohabiting	12	26	62	**p < 0.0001**
not currently part of a couple	15	22	63	
New partner during the year				
yes	17	33	50	
no	7	44	49	**p < 0.0001**

The women who know someone who is HIV+ took the initiative to seek screening twice as often as the others (16% versus 7%). Women who had ever used condoms also sought screening twice as often as the others (10% versus 5%).

Finally 8% of the women who had ever had sexual relations reported never having been tested (voluntary or systematic) and never having used a condom, but having had an abortion. In this group (n=40), in which the Melanesians (60%) and Polynesians (18%) were over represented, 35% of the women had experienced rape, attempted rape or other sexual violence; this was the case for 22% of the rest of the sample.

Discussion

In a society where achieving equality among ethnic groups in health and in other domains has been an objective since 1988, all our results indicate the persistence of gaps: in the area of HIV and reproductive health, the Islanders (Melanesian and Polynesian) are less well informed and protect themselves less well than the Europeans; they also have the lowest educational level and the lowest income.

Using condoms at some point in life is associated with recognition of the risk of sexual infection but not with a systematic strategy of risk management

As elsewhere, knowing a person directly affected by HIV influences prevention and screening behaviors. This proximity is greater in urban than in rural areas. The stigmatization of persons with HIV infection or AIDS in villages explains the low rate of acquaintances with the disease among rural Melanesians: because everyone knows everyone, secrecy is strong. A qualitative study in 1996 showed that in the North province rumors led to exclusion from their residence group for the persons allegedly affected.[3] On the other hand, urban Melanesians are more likely than both rural Melanesians and rural Europeans to know someone who is HIV+. Polynesians – who all lived in urban areas – are an exception among the urban women: relative to the level of infection in their ethnic group, few of them know anyone who is HIV+, despite the existence of a group of Polynesian transvestite prostitutes. This should be considered in light of the isolation, even rejection, of these prostitutes.

Using condoms at some point in life is associated with recognition of the risk of sexual infection but not with a systematic strategy of risk management, as we can see from the still substantial proportion of women who do not use condom with a new partner. Moreover, as previously observed in French Polynesia[4], talking about the risk appears for some sufficient to provide confidence that protection is not needed.

Ethnic group is a major determinant of condom use: Melanesians and especially Polynesians clearly use condoms less than those of European descent. Among Polynesians, 85% of whom are practicing Catholics, low condom use seems related to religious considerations. The difference between ethnic groups is nonetheless clearly less marked among those 18-24 years; prevention behaviors among the young are becoming more homogenous.

Nonetheless when we consider unwanted pregnancies as an indicator of prevention (or more precisely, its absence), we note that this rate is particularly high among the Melanesians, including the youngest age groups. We also note that Melanesians have more unwanted pregnancies and also abort them the least often. And in a striking contrast to the European women, it is because they lacked access to physicians who could perform an abortion (although they didn't change their minds about abortion).

The high proportion of women screened is a function of the high fertility rates in New Caledonia (2.5 children, with variations ranging from 3.3 in the islands to 2.3 in the South) and of the efforts to provide adequate prenatal care. Nonetheless there is a discrepancy, especially high in the northern and islands provinces, that is, among Melanesians, in the number of women who report screening and the number who were pregnant and should have been offered screening. This is particularly alarming because in 2000 the last cases of seropositivity came from the "islands or the interior" (that is, everywhere except the Noumea metropolitan area) and were identified at advanced stages.[5] The discrepancy appears to be associated more with the absence of informed consent among women than to failure to suggest it systematically (or to refusal), since overall, 88.6%, of new mothers are screened, although the rate is lowest among the Oceanians: 92% among Europeans, 87% among Melanesians and 84% among Wallisians and Futunians.[1] Our observations about the problems of the information provided to the Oceanian women is similar to observations already made in an 1996 anthropological study[3] and in a 2001 survey of HIV seroprevalence among pregnant women.[1] Like that survey, ours shows not only the absence of the mandatory pre-test interviews but also shortcomings in the screening of women who have elective abortions. Suggesting testing to woman having abortions is currently optional for physicians in New Caledonia; regulatory extension of mandatory offers could remedy

this problem. Vulnerability to HIV among the group of women who do not use protective behaviors for themselves but have already had an abortion is correlated with lifetime experience of sexual violence; this finding too is consistent with studies elsewhere about violence and reproductive health.[6]

Finally the distribution of voluntary testing at the woman's own initiative (except for those who have been advised by physicians), is still less frequent among Polynesians and Melanesians; this too attests to inequalities in information and access to screening.

Conclusion

Despite the low prevalence of HIV in the general population and improved prevention behaviors among young Oceanian women, especially perceptible in the more frequent condom use among those aged 18-24 years, our results reveal the importance of the inequalities in information and protection that disadvantage Melanesian and Polynesian women. In view of the regular progression in heterosexual infection, especially in rural areas, therefore within the Melanesian ethnic group, these findings make us fearful of an epidemic flare-up. Accordingly, messages and measures adapted to these populations are urgent, as is the training for this of medical personnel (essentially coming from France) in health centers to convey the messages and accomplish the measures. Moreover, these questions about reproductive health and HIV prevention must be considered together; they must also be taken into account in the information and services for women exposed to situations involving violence, which affects their ability to manage their sexual and reproductive lives and health.

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Acknowledgements

This study received, among other sources of funding, financial support from the National Agency for AIDS Research (ANRS decision 2002/002), and Ensemble Contre le Sida (Together Against AIDS) (in 2002 and 2003).

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If you do things well, do them better.
Be doing, be first, be different, be just.
Anita Roddick of Body Shop (1943)