

The knowledge of AIDS in Morobe Province, Papua New Guinea

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Abstract

The study of the knowledge, attitudes and practices related to HIV/AIDS was conducted in three areas (Kaiapit, Coastal Lae, and Lae settlements) of Morobe Province in Papua New Guinea from July 1993 - January 1994.

The target population was both males and females aged between 15-45 years old. The overall response rate for the survey was 65%. The average age of the respondents was approximately 26 years old. A majority of city dwellers in Lae settlements knew of AIDS (96%) whereas only 33% of people in Kaiapit and 55% from the Coastal Lae area demonstrated knowledge of AIDS. A majority of people who heard about AIDS believed that prostitutes (80% - Lae, 73% - Kaiapit, 72% - Coastal Lae) and having sex with infected person (51% - Lae, 35% - Kaiapit, 61% - Coastal Lae) could transmit HIV. However, not many people seemed to know other modes of transmission. A majority of people believed that having a single, faithful partner could prevent transmission of HIV. Opinions regarding the infected person were prejudicial. A majority suggested quarantine and some, incarceration.

Although far from conclusive due to the limitations of the study, the survey revealed a pattern of understanding about the transmission and the prevention of HIV/AIDS among people in Morobe Province. The results indicated that the AIDS information they had obtained was inadequate and problematic.

Introduction

Concern about the AIDS pandemic has become evident even in Papua New Guinea, where the majority of the

population still depend heavily on the subsistence economy. The first HIV positive case was identified in 1987. By the end of December 1993, 160 HIV positive cases and 55 confirmed AIDS cases were identified (DOH, 1993). These figures under-estimate since the reporting system is still problematic due to the breakdown of overall health care infrastructure in Papua New Guinea (PNG).

In July 1993, as a part of the final evaluation of the Child Survival VI Project, Project Concern International (PCI) conducted a KAP survey on child survival and maternal health in Kaiapit District of Morobe Province. Because of the growing concern about the HIV/AIDS situation, 10 questions on HIV/AIDS were included in a modified version of KAP questionnaire developed by the Child Survival Support Program at the Institute for International Programs of the John Hopkins

University School of Hygiene and Public Health. The same instrument was used to conduct the baseline survey for the Coastal Lae and the Lae settlements. The survey was conducted in three project areas consisting of approximately 25% of the total

Morobe population between July 1993 to January 1994.

The purpose of the survey was to acquire information on the current knowledge, attitudes and practice of sexually active people about HIV/AIDS. The information is being used to develop and design strategies for the achievement of PCI objectives in Morobe Province.

Methodology

Introductory letters explaining the purpose and the date of the survey were delivered to the headmen and the leader of women's group at each village and settlements prior to the visit by PCI staff. Health center staff also notified the village in some cases.

The questionnaire consisted of 10 questions translated into Tok Pidgin, a common language in PNG. The questionnaire was then translated into other local languages. The translated questionnaire (Tok Pidgin) was pre-tested with approximately 10 people and modified.

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The survey was conducted in 3 phases; first Kaiapit district, Coastal Lae area and then Lae settlements. Three separate training sessions for interviewers and supervisors were conducted. Each consisted of two days of intensive workshop and one day of field practice. A nearby village not included in the sample was utilized for field practice so that surveyors familiarized themselves with the procedures and gained confidence in conducting the survey. In the Coastal Lae area, interviewers/supervisors previously trained by PCI were recruited. A total of 17 supervisors and 51 interviewers were recruited from the survey areas and trained by PCI staff. All of the supervisors and interviewers could speak English and Tok Pidgin in addition to their local languages.

Before the individual household survey in each village and settlement, the supervisors introduced interviewers to the headman and leader of the women's group in order to gain the cooperation and secure the participation of the community.

Sampling: Since the initial HIV/AIDS survey was part of the Child Survival KAP survey, the target population for the rural area comprised women with children under two years of age. The women's husband were also interviewed whenever they were available. For the urban area, both men and women aged between 15-45 years old were interviewed.

Since the initial survey conducted in Kaiapit included the questions on EPI, the unit for sampling in Kaiapit and Coastal Lae was women with children equal or less than 24 months of age and their husbands. For the Lae settlements, the study population was both men and women aged between 15-45 years old. Although the unit of sampling differed slightly between the survey areas, the age composition was the same. The total study sample was 1404.

Following the survey protocol endorsed by USAID, the 30 cluster sampling techniques was utilized for the survey in Kaiapit and Coastal Lae. A total of 38 settlements in Lae were identified and an area probability sampling technique was used. A total of 17 settlements were selected. A total estimated population in three areas was 87,000 consisting of approximately 25% of the total population of Morobe province (1990 census data). The total sample size was 1404; 600 (300 women and their husbands) each for Kaiapit and Coastal Lae areas and 204 for the Lae squatter settlements.

A listing of the households at each village and settlement was not available. The selection of household was determined based on WHO's recommended procedure of utilizing a simple object to determine the direction and the location of the first house to visit.

Data Analysis: Using tally sheets, each supervisor summarized the data manually. A total of 77 summary sheets were compiled initially.

The questionnaires were then sent to the PCI Port Moresby office for computer analysis using the *EPI Info* statistical package.

Results

The overall response rate was 65%. The low response rates was due to the unavailability of men in the Kaiapit District; the response rates from female was 79% (237 out of 300) whereas the response rates from males was 6% (18 out of 300). For the Coastal Lae area, the response rates were 97% (291 out of 300) female and 56% (169 out of 300) male. For the urban area, the response rate was 100% (204). Forty-two percent (85 out of 204) of the urban respondents were female (Table 1).

Gender	Lae Settlement	Kaiapit	Coastal Lae	Total
Women	42% (85)	93% (237)	63% (291)	613
Men	58% (119)	7% (18)	37% (169)	305
Total	100% (204)	100% (255)	100% (460)	919

The average age of the respondents for urban area (Lae settlements) was 25 years old, and 27 years old for women in the rural area (Kaiapit and Coastal Lae). The literacy rate for urban area was 74% whereas the literacy rate for Coastal Lae was 54% and 30% Kaiapit women.

HIV/AIDS knowledge: Nearly all the urban respondents (96%) were aware of HIV/AIDS whereas 60% of the Coastal Lae people and 35% of Kaiapit people indicated awareness of the disease. The combined results on HIV/AIDS questions are presented in Table 2.

The most commonly reported source of information about HIV/AIDS were commercial radios, newspapers, wantoks (people from the same village, or area), and health professionals. In the urban area, radios and newspapers were commonly cited whereas in the rural areas, radio and wantoks were the common sources of information.

The respondents displayed similarities in their knowledge of HIV/AIDS regardless of the areas, urban or rural. Of those who know of AIDS, almost all believed that prostitutes were the primary mode of transmission. Sex with a HIV infected person was next. Very few people indicated other modes of transmission such as blood transfusion, reuse of contaminated syringes and needles, and the transmission from a

Table 2. HIV/AIDS knowledge in the Morobe Province

	Lae Settlement %	Kaiapit %	Coastal Lae %
Spread of AIDS			
Infected blood	28	1	9
Sex with an infected person	51	35	61
Infected mother to baby	17	4	3
Contaminated needles	8	0	8
Prostitution	80	73	72
Cure for AIDS			
No	89	73	78
Prevention of AIDS			
Use condoms	46	5	7
One partner	73	67	70
Avoid contaminated needles	17	8	16

mother to an unborn child. A majority of respondents indicated that there is no cure for AIDS at this time (Table 2).

Most of those who had heard of AIDS believed that it could be prevented by maintaining a monogamous relationship with a single, uninfected partner. Almost half the urban settlers knew condoms could be useful for preventing HIV/AIDS; however, condom use was rarely mentioned among rural people. Other factors such as avoid sharing contaminated needles and syringes were rarely mentioned both in urban and rural areas.

Attitudes toward an HIV/AIDS infected person: The attitudes toward HIV/AIDS infected persons were prejudicial regardless of the area. A majority of respondents favoured quarantine and incarceration for the infected person.

The practice of preventing HIV/AIDS: A majority of respondents believed that maintaining a single faithful sexual partner is an effective method of preventing HIV/AIDS. Knowledge that condom usage could prevent infection was more common (34%) in the urban area, and almost non-existent in the rural areas. Reported use of condoms was higher among urban dwellers (20%). Almost no one reported

using them in the rural areas. Avoidance of used needles, syringes and infection from blood transfusion were rarely mentioned.

Discussion

The HIV/AIDS survey was conducted in three areas in three phases; Kaiapit district as part of the KAP survey for the Child Survival VI final evaluation, Coastal Lae area, and Lae settlements. As previously stated, the unit of sampling differed slightly between the urban and rural populations.

For Kaiapit District, only 18 men responded. The exact reasons for the low response of men in Kaiapit were not known. Interviewers could only interview after women came back from their gardens at about 4 p.m., and the interviewers and supervisor did not seek out the husbands if they were not with their wives. Because there was no electricity in the village, many interviews took place at dusk or by flashlight. The survey was conducted during the school break and the student-interviewers were eager to spend their breaks with their families. In addition, PIC staff were not involved in the actual survey in Kaiapit but they were involved with the coastal area.

Among the constraints faced by the surveyors was the location of the villages. They were widely dispersed and a majority of the villages could only be reached by boat or on foot. Some of the surveyors had to walk more than 8 hours to reach some of the villages. Sometimes, they were accompanied by village men for security reasons.

Another difficulty in conducting a survey in PNG was the variety of languages, which varied even among neighboring communities. Translating the questionnaire from Tok Pidgin to the local languages was problematic since none of the PCI staff spoke or understood the local languages involved, although the interviewers were recruited based on their knowledge of the local speech. It was left to the discretion of the interviewers to conduct the interview by Tok Pidgin or the local language.

The educational level of supervisors and interviewers were also problematic for the rural areas. The highest educational level of the surveyors was 12th grade and the lowest was 10th grade. The supervisors were supposed to check each questionnaire before they left the villages and to record the correct information onto a tally sheet; however, some of them did not comply with the procedure.

As expected, many more people were aware of HIV/AIDS in the urban area than the rural area. The survey revealed high literacy rates and higher educational levels than anticipated

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among the urban settlements: 38% of respondents had completed grades 4-6 and 38% had some secondary or higher education. This might be due in part to the inclusion of both legal and illegal settlements in the survey. Legal settlements are well established for many years whereas the illegal settlements comprise recent migrants.

Among those who knew of AIDS, the understanding of how HIV was transmitted and how to prevent infection was inadequate. Prostitution as the cause of transmission of HIV/AIDS has been overly emphasized while other factors has been neglected. Only half of the respondents were aware that having unprotected sex with an infected person could expose them to the virus.

The message of maintaining a single faithful partner seemed to have been received, whereas the use of condoms for the prevention of HIV/AIDS was not. This seems to suggest that messages emphasizing maintaining a single partner might be effective among married couples; however, it is more problematic among single people searching for lifelong partners. The actual condom usage was very low (9% - combined percentage).

The dominant religion in PNG is Christianity. Many church leaders and their rural congregations believe that the usage of condoms promotes promiscuity, thus the discussion of condoms is a very sensitive matter. Some health educators are afraid or hesitant to even mention condoms. This creates a problem for health educators trying to raise awareness of HIV/AIDS and how to prevent transmission. The members of the National AIDS Committee have expressed concern that the opposition from the church groups might hinder the prevention of HIV/AIDS. One way to approach this problem may be to provide not only AIDS education but also proper sex education to church and community leaders.

Another major problem is law and order. The gang-rapes are quite common not only in the cities but also in the villages. This problem is enhanced by alcohol consumption, which is widespread. No detailed information about rape victims has been collected and the magnitude of the problem is not

clearly known. In addition, adolescents face courtship problems due to a changing social system. It is very difficult, particularly young men living in the urban area, to find a woman to marry because the bride price is so expensive that not many men can afford to pay. Thus, many young men are without partners. This may contribute to the cause of rapes in the urban area and is compounded by the excessive use of alcohol among young men in PNG.

The attitudes toward the HIV infected person is prejudicial. Some people favored quarantine or incarceration, and, worse

yet, a few recommended that the HIV infected person be put to death. Very few were sympathetic towards people with HIV/AIDS. J.O'Malley (1993) suggests that the existence of societal discrimi-

nation is the factor most closely linked to an increased risk of exposure to HIV. In addition, personal vulnerability to HIV infection increases with lack of accurate, relevant and comprehensible information about HIV. The results of the study clearly indicated that the knowledge of HIV/AIDS of the majority of people was inadequate and inaccurate. It is critical to provide accurate, meaningful information about HIV/AIDS to achieve a realistic and clear understanding of HIV/AIDS problems in the community at large.

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In 1988, the Society for Women and AIDS in Africa (SWAA) first used the phrase “triple jeopardy” to indicate that women are threatened by HIV and AIDS on three fronts: as individuals, mothers and careers.