

AIDS AWARENESS AMONG JAMAICANS

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ABSTRACT

In Jamaica, the Acquired Immune Deficiency Syndrome (AIDS) is quickly becoming a serious health threat. Two hundred eighty nine cases (289) have been reported from December 1982 through November 1991, over half of which presented in the last 23 months. Even so, this study shows that most Jamaicans have a very limited understanding of the disease. Of 250 participants in a verbal survey, 33% replied that they did not know that the acronym "AIDS" referred to a disease, much less the specific type of disease. Yet, those surveyed had strong opinions as to how information should be disseminated, such as in clinics and schools and through the use of television, radio broadcasts, and newspapers. Strategies are suggested for effective education.

KEY WORDS

acquired immune deficiency syndrome, Jamaica, health education, survey

INTRODUCTION

In Jamaica, the Acquired Immune Deficiency Syndrome (AIDS) has become an increasingly crucial health care issue. Jamaicans have seen a rise in AIDS cases in the past decade, with a total of 289 cases reported through November 1991 in a population of 2.4 million (1, 2). Fifty-two percent of these were reported in the last 2 years (Table 1).

Over one-half of the cases (57%) were within the 20-39 year age range (3).

Fifteen percent were 40 to 49 years old. In 12% of the cases, children were infected by their mothers during pregnancy or childbirth.

Sexual intercourse has been documented as the most common mode of transmission of the HIV virus in Jamaica (82%) (4). As reported in December 1989, 46% of those infected were heterosexual adults, 11 % were homosexual males, 7% were bisexual males, 15% were children, and the sexual practices of 21% of the cases were unknown. The male to female ratio of the reported cases was 2.4 to 1(4). By November 1991, the male to female ratio had decreased to 1.9 to 1, indicating a shift toward a more equal balance of male and female involvement (2).

In 60% of the reported AIDS cases, the infection

Table 1. Timetable of AIDS cases in Jamaica

YEAR	MALE	FEMALE	#OF CASES ANNUAL TOTAL	CUMULATIVE TOTAL
1982	1	0	1	1
1983	0	0	0	1
1984	1	0	1	2
1985	4	0	4	6
1986	5	0	5	11
1987	20	13	33	44
1988	22	8	30	74
1989	44	20	64	138
1990	41	21	62	200
(to Nov.) 1991	51	38	89	289
TOTAL	189	100	289	289

occurred locally. Thirty-one percent of those infected contracted the disease while traveling or living abroad. The other 9% was unknown (3).

The fear of contracting AIDS has made the disease a concern in many countries where it is prevalent, often leading to a change in behavior (5). However, despite efforts by the Jamaican Ministry of Health through the use of clinic pamphlets, newspaper articles, radio broadcasts, and television commentaries, a lack of understanding about the etiology, transmission, and prevention of AIDS still persists in Jamaica. The purpose of this study was twofold: To assess public awareness about the disease and, in turn, to gain some useful insight as to which educational programs may be the most beneficial.

METHODS

The primary sources of health care for most Jamaicans are the local clinics and hospital emergency rooms. Patients visit these health care facilities for medical treatment and information. Between the months of July 1989 and March 1990, 250 patients were interviewed during their clinic visit to one of three sites on the island of Jamaica, West Indies: Falmouth (n=86), Lucea (n=85), and Montego Bay (n=79).

After obtaining permission to administer the questionnaire, the age, sex, and number of offspring was recorded by one of six independent interviewers. Each subject was then asked a series of eleven questions pertaining to AIDS. The questions (Table

2) were derived from a brochure distributed by the Jamaican Ministry of Health at various locations throughout the island (6). Although available, this pamphlet, entitled "AIDS KILLS!: Don't Let It Kill You", had not been actively distributed at any of the research sites prior to testing. Questions 1-11 were verbally posed to each patient. When necessary, the questions were further clarified. The responses were then placed into answer categories as seen in Table 2. Most of the categories were defined before the survey had begun, however, since multiple answers from each respondent were allowed and encouraged, new categories were added as needed.

RESULTS

Of the 250 survey respondents, 34% visited the Falmouth Clinic, 34% were patients at the Lucea Clinic, and 32% were interviewed at the Montego Bay emergency room. Overall, 79% of the patients were female and 21% were male. Most subjects sought care for minor medical complaints.

Patients were also grouped according to age. Those from age 10-19 years (n=39, 16%) were placed in the first group, followed by ages 20-39 years (n=161, 64%) and those at or above 40 years old (n=50, 20%). The number of offspring was used to obtain a general perspective on the level of sexual activity of the survey participants (Table 3). Six hundred sixty eight (668) children were claimed by those polled, giving an average of 2.67 children per person. The 10-19 year age group had 0.86 children per person, while the 20-39 year olds had an average of

Table 2. AIDS awareness among Jamaicans survey

	Responses by Age Group		
	10 to 19 yr (n = 39) %	20 to 39 yr (n = 161) %	40 + yr (n = 50) %
1. What is AIDS?			
Acquired Immune Deficiency Syndrome	3	6	2
A disease of the immune system	0	3	2
A sexually transmitted disease	5	9	6
A disease	41	57	52
I don't know	44	25	34
Other	8	1	6
2. What causes AIDS?			
A virus	3	8	2
Sex	23	41	40
Drugs	0	1	2
Bug/germs	0	5	4
Body fluids	0	1	0
Other	3	7	8
I don't know	74	41	50
3. How is AIDS spread?			
Sex	67	84	68
Needles	3	5	6
Blood	5	14	2
Direct contact	5	1	2
Giving blood	10	0	0
Semen	0	0	0
Infected mother to her unborn child	0	1	2
Other	41	9	26
I don't know	5	7	2
4. Who is in danger of getting AIDS?			
Anybody	26	34	28
Prostitutes	5	11	12
Others with multiple sex partners	13	21	14
Homosexuals	18	20	10
Bisexuals	3	6	2
IV drug abusers	0	3	2
Someone who has sex with an AIDS patient	10	11	14
Unborn children from infected mothers	5	4	6
Casual contact with a diagnosed AIDS patient	0	0	4
Other	5	2	0
I don't know	38	22	26
5. What are the signs and symptoms of AIDS?			
Persistent fever	8	7	6
Weight loss	10	27	14
Sudden weight loss	5	6	2
Fatigue	3	14	8
Swollen glands	0	5	
Thick white coating or patches on tongue	0	4	0
Rash	10	22	6
Dry cough	3	2	2
Diarrhea and loss of appetite (> 1 month)	5	5	4
Colds	10	4	4
Other	21	16	14
I don't know	54	44	58

Responses by Age Group

	10 to 19 yr (n = 39) %	20 to 39 yr (n = 161) %	40 + yr (n = 50) %
6. Do persons with AIDS always show these signs?			
Yes	3	18	12
Sometimes	3	23	14
Never	21	19	2
Other	3	0	2
I don't know	72	40	72
7. What is ARC?			
AIDS-Related Complex	0	0	0
Pre-AIDS	0	0	0
I don't know	100	99	100
Other	0	1	0
8. How would you interact with a known AIDS patient (including friends/family)?			
Would not touch patient	21	17	6
Would not hug patient	3	1	0
Would not have sexual intercourse with patient	10	19	10
Would not kiss patient	0	1	2
Would not touch food/other possessions of patient	5	7	2
Would not be in same room as the patient	21	21	28
Would behave normally toward patient	26	13	16
I don't know	23	12	26
Other	8	16	12
9. Is there a cure for AIDS?			
Yes	5	4	2
No	74	80	60
I don't know	21	16	38
Other	0	0	0
10. Where have you learned your knowledge about AIDS?			
Television	36	37	20
Radio	23	47	40
Paper	15	25	22
Family	0	1	0
School	28	5	0
Friends	23	12	20
Other	10	11	14
Clinic	8	19	10
11. Where should information about AIDS be disseminated?			
Television	10	14	6
Radio	8	13	8
School	28	20	18
Printed material	3	8	6
Church	3	1	4
Family	0	1	6
Clinic	23	36	32
Community lecture	13	28	18
Other	15	10	14

2.5 children per person. The 40 plus age group, as expected, had the most children with an average of 5.0 children per person.

A summary of the responses to each of the 11 questions are shown in Table 2.

DISCUSSION

The responses to the first two questions were used to assess the basic understanding of AIDS. The first question "What is AIDS?" was meant to determine whether they could define the syndrome. In the 10-19 year old age group, only one person (3%) responded that it was "Acquired Immune Deficiency Syndrome". Forty-one percent acknowledged that it was a disease but could not be more specific. Fifty-two percent either answered incorrectly or admitted that they did not know. As suggested by the number of women in this group with children (33%), many of the teenagers in Jamaica are sexually active. It has been previously reported that in Jamaica 46.3% of the boys and 15.3% of the girls had engaged in sexual intercourse by the age of 14 (7). Another survey in 1988 indicated that 23% of the males and 2% of the females had more than one sexual partner within the 4 weeks preceding the interview (7). This age group will be at particularly high risk if proper training in the practice of safe sex and AIDS awareness is not strongly encouraged.

Over half of all AIDS cases in Jamaica have been reported in the 20-39 year old age group (3). The period between ages 20 and 39 can be a very sexually active period and may be the most likely time for an individual to have multiple sexual partners. Also, Jamaican men between 20 and 39 are the most likely group to be employed as migrant farm workers. According to the Jamaican Ministry of Health (2), migrant farmers have contracted the highest percentage of imported AIDS cases in Jamaica. Fifty-two percent of the people infected abroad

Table 3. Offspring of survey participants by age and site

SITE	AGE	# OF CHILDREN
FALMOUTH	10 to 19	2
	20 to 39	157
	40+	97
LUCEA	10 to 19	19
	20 to 39	140
	40 +	83
MONTEGO BAY	10 to 19	3
	20 to 39	103
	40+	64
TOTAL		668

were migrant farm workers. Interestingly, the 20-39 year old age group were better able to define AIDS. Seventy-five percent offered at least one of the correct responses. Most of the patients in this age group (57%), however, recognized it only as "a disease".

The majority of the patients responded that AIDS could be transmitted through sexual intercourse. However, 41 % of the younger group, 9 % of the middle group, and 26% of the older group claimed that they did not know how AIDS was spread. The message regarding sexual intercourse is reported by many of the respondents as having been addressed in past educational programs. This point should continue to be stressed in all education programs since it is common for individuals to become sexually active at a young age and for many, particularly males, to have multiple sexual partners (7). As such, the potential for spread of AIDS via heterosexual relations is significant. Many of the other means of transmission (needles, blood products, infected mother to unborn child) were rarely mentioned. Although these means of transmission may not currently be as common in Jamaica as in other areas, care should be taken to educate all people fully about how the disease can be spread.

Although many of the respondents realized that homosexual men and those who are sexually promiscuous are in high risk categories, many others were unable to name any of the major risk groups. Some felt that infection could result from casual contact while several others believed that it could only be caught by engaging in homosexual intercourse. On average, 32 % stated that everyone was at some risk for contracting AIDS. It is important to note that migrant farm workers are a significant risk group for this population. Many of these workers may unknowingly contract the HIV virus in the United States then return to Jamaica as a potential source of infection (7). This special situation should be discussed in all educational sessions about the spread of AIDS.

The majority of the patients knew that there was no known cure for AIDS (75%, overall). A small percentage (25%) did not know, which warrants continued emphasis during educational sessions.

Many respondents gave multiple answers on how they learned about AIDS. In the 10-19 year old age group, 36% of teenagers said that television was their main source of information while 28% provided school as an answer. Twenty-three percent said that they had learned about AIDS from the radio, while another 23% said they learned about AIDS from

friends. None of the respondents of the 10-19 year old age range included family as a source of information about AIDS. In fact, only one person out of all the respondents said that she learned about AIDS from her family. This may imply that it may not be an issue deemed appropriate for discussion with family members. Other explanations may be that the older family members are not familiar enough with or concerned enough about the topic to discuss it.

Twenty to 39 year old mentioned most often that they had gained their present knowledge about AIDS from the radio (47%). This is not surprising since more radios were owned than televisions (910,000 radios vs 387,000 televisions) (1). The Jamaican Ministry of Health has developed short commercial radio broadcasts about AIDS, and many of the respondents referred to these broadcasts during the interviews. Thirty-seven percent of the 20-39 year olds did mention television as a source of information. Information available at the local clinics (pamphlets, brochures, informational wall posters, etc.) also appears to have made some impact.

In the 40 plus age group, many mentioned that they had learned about AIDS from the radio, newspaper, and television (40%, 22%, and 20%, respectively). Interestingly, 20% of the 40 plus age group also mentioned friends as an informational source.

Thus, a majority of the patients realized that AIDS was a disease and that it was spread through sexual intercourse, but few were familiar with the etiology, transmission, or prevention of AIDS. All media sources (TV, radio, newspaper) should continue to be used to disseminate educational information about AIDS. In clinics, AIDS educational materials and lectures should be systematically provided by the health care personnel. Information should also be introduced into each school's curriculum to instill concern about this important issue at a young age. The demand and need for AIDS information worldwide is high, especially among young people (8).

ACKNOWLEDGMENTS

The authors would like to thank Dr. Irwin Cohen for his help and encouragement on this endeavor.

REFERENCES

1. Hoffman MS, ed. The World Almanac and Book of Facts 1990. New York: Scripps Howard Company, 1989.
2. Jamaican Ministry of Health. Preliminary report of AIDS Summary: December 1982-December 1991, 1989.
3. Planning Institute of Jamaica. Economic and Social Survey. Kingston, Jamaica: Planning Institute of Jamaica, 1990.
4. Jamaican Ministry of Health. AIDS Summary: December 1982-December 1989, 1989.
5. Jeffery RW, Burke GL, Schmid TL, Ma J. Pilot Study of AIDS Risk in the General Population. Public Health Reports, 1992; 107; 105-109.
6. Jamaican Ministry of Health. AIDS KILLS! Don't Let It Kill You, 1989.
7. Figueroa JP. AIDS Projections, A Jamaican Perspective. Pan American Health Organization Bulletin, 1989;23 130-134.
8. Rudnicka I. The problems of talks on the venereological confidence telephone. In: Advances in pathogenesis, diagnostic and treatment of skin and venereal diseases. Proceedings of the XXIV Congress of Polish Dermatologic Society, Gdansk 1992. 09.24-26. H. Szarmach (editor), Drukarnia Archidiecezji Gdanskiej, 1992, Gdansk, pp. 535-540.

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