Changes in HIV needs identified by the National AIDS Hotline of Trinidad and Tobago

Sandra D. Reid, Anders L. Nielsen, and Rhoda Reddock

Suggested citation

Reid SD, Nielsen AL, Reddock R. Changes in HIV needs identified by the National AIDS Hotline of Trinidad and Tobago. Rev Panam Salud Publica. 2010:27(2):93–102.

ABSTRACT

Objectives. To examine utilization of the National AIDS Hotline of Trinidad and Tobago (AIDSLINE), evaluate its validity as a reliable data source for monitoring national HIV-related needs, and identify changes in caller requests between two different time periods. **Methods.** A total of 7 046 anonymous hotline calls in 1998–2002 (T1) and 2 338 calls in 2007 (T2) were analyzed for associations between caller characteristics and call content. A subsample of the data was also analyzed qualitatively. T1 findings were compared with HIV-related data collected by national policy-makers during that period, to evaluate the hotline's validity as a data source, and findings from T2, to reveal changes in call content over time. **Results.** In T1, the hotline was well utilized for information and counseling by both the general population and those living with HIV/AIDS. Call content from T2 indicated an increase versus T1 in 1) general awareness of HIV and other sexually transmitted diseases; 2) HIV testing; and 3) knowledge of HIV symptoms and transmission. HIV-related mental health needs,

and the relationship between HIV and both child sexual abuse (CSA) and intimate partner violence (IPV), were identified as emerging issues.

Conclusions. AIDSLINE is a well-utilized tool for providing information and counseling on national HIV-related issues, and a valid, cost-effective, easily accessed information source for planners and policy-makers involved in HIV management. Over the two study periods, there was an increase in HIV awareness and testing and in requests related to mental health,

Key words

HIV; sexually transmitted diseases; monitoring; hotlines; Trinidad and Tobago.

Trinidad and Tobago, the southernmost country in the Caribbean, has a population of 1.05 million (1). National prevalence of human immunodeficiency virus (HIV) among adults (those aged 15–49) was 1.5% at the end of 2007, a

small increase over the 1.4% prevalence found in 2002 (2), and one of the highest rates of HIV in the Caribbean region. The epidemic has garnered considerable attention from health planners and national policy-makers in the last two decades (3-6), and various educationoriented strategies have been implemented to reduce risky sexual behaviors (7). Knowledge of common sexual beliefs and practices within the population, including misconceptions about sexual behaviors and HIV transmission, is crucial for planning and designing appropriate and effective interventions. In Trinidad and Tobago, the norms of

CSA, and IPV, but no change in sexual behaviors.

music, dress, language, popular culture, and casual interactions are highly sexually charged, yet open discussion about sexual beliefs and behaviors, and their relevance to transmission of HIV and other sexually transmitted diseases (STDs), are strikingly absent (8, 9). Questions among individuals with concerns or inaccurate beliefs that are not addressed in national educational campaigns may remain unasked due to embarrassment or fear.

An anonymous AIDS hotline can provide callers with a source of accurate information and confidential counseling and national policy-makers with a repos-

Psychiatry Unit, Faculty of Medical Sciences, University of the West Indies, St. Augustine, Trinidad and Tobago. Send correspondence to: Sandra D. Reid, Psychiatry Unit, Faculty of Medical Sciences, University of the West Indies, St. Augustine, Trinidad and Tobago; e-mail: reid.dr@email.com

Department of Medicine, University of the West Indies, Cave Hill, Barbados.

Institute for Gender and Development Studies, University of the West Indies, St. Augustine, Trinidad and Tobago.

itory of data that can serve a vital function in identifying sexual misconceptions, inaccurate information, counseling needs, and barriers to prevention efforts among the population. The individualized and confidential nature of the hotline interaction is likely to result in the revelation of information that would not be forthcoming in other types of surveys. This supposition was borne out in a review of local AIDS hotlines in two U.S. states that found that many individuals utilizing the hotlines had information needs related to their own personal experiences that were not addressed through media campaigns or other means of mass public health education (10).

Assessment of the effectiveness of prevention interventions is vital for management of the HIV epidemic. When resources are limited and thus seem best directed to acute management of the epidemic, individual and community randomized trials, while scientifically rigorous, become difficult to implement, and may not be cost-effective. In these cases, a national anonymous hotline can be an effective and affordable surveillance tool for documenting changes in sexual beliefs and behaviors as well as HIV-related needs and concerns.

The National AIDS Hotline of Trinidad and Tobago (AIDSLINE) was established in 1988 through the collaborative efforts of the Ministry of Health, the U.S. Agency for International Development (USAID) AIDS Public Health Communication Project (AIDSCOM), and the Caribbean Epidemiology Centre (CAREC). Funded by various private organizations and international funding agencies, as well as a government subvention, AIDSLINE provides general information, anonymous and confidential counseling, and referral services designed to address the needs of its users on matters related to HIV/AIDS and other STDs. The hotline is manned by a group of volunteers that receive a minimum of 40 contact hours of training and regular educational updates.

Despite the widespread use of AIDS-LINE since 1988, there has been no indepth research on the nature of its usage. The current study aimed to fill this gap by examining valid hotline calls (those classified by hotline operators based on predefined criteria) to identify caller characteristics, HIV/AIDS information and counseling needs, and sexual and HIV-related misconceptions, as well as any correlations between certain types

of callers and the questions they asked. It also compared caller/call data from 1998 to 2002 with the same type of data from 2007 to determine any significant changes in national HIV-related needs after one decade of HIV management, and assessed the validity of AIDSLINE as a means of identifying these needs.

The specific objectives of the research were to examine the utilization of AIDS-LINE, identify any changes in callers' HIV needs from the two study periods, and explore the assertion that HIV/AIDS hotlines can serve as reliable and affordable vehicles for monitoring national HIV-related needs. The study assumed any changes in hotline use or call content from 1998–2002 to 2007 reflected emerging HIV/AIDS needs as well as the impact of national HIV-related interventions.

MATERIALS AND METHODS

AIDSLINE records information about anonymous telephone calls, including the demographic characteristics of the caller and the reason(s) for the call, on standardized data collection forms that include an open-ended section for brief description of 1) any special needs of the caller, 2) other comments, and 3) the action(s) taken by the hotline operator. Data collected from callers in the fiveyear period from 1998 to 2002 (T1) and for the year 2007 (T2) were gathered from these forms, coded into a database, and analyzed. This exploratory-descriptive study was conducted in accordance with guidelines described in the Policy of Research Ethics of the University of the West Indies (1998).

Data analysis

The data obtained from AIDSLINE callers and recorded on standard AIDS-LINE paper forms were scanned using TELEform® Elite data capture software (Cardiff Software Inc., San Diego, CA, USA) and automatically coded to an electronic database with automated validation (11).

Quantitative data were prepared for analysis using the query function in Microsoft Access 2000 (Microsoft, Seattle, WA, USA), and tables for statistical analysis were exported from the database to statistical package Statistica, version 7.1 (StatSoft, Tulsa, OK, USA).

Before analysis, all data were plotted using three-dimensional (3D) plots. No

seasonal or monthly variation was spotted in the data sets. The observations were tested using the Student's *t*-test for independent variables. The larger data set (from T1) was collapsed into 60 groups (one for each month of the five-year study (5 years × 12 months/year = 60 months)). The data from T2, which only included one year of observations, were collapsed into 12 groups (by number of the month when the observations occurred). Associations were analyzed using the Pearson correlation coefficient using a level of significance (*P*-value) of 0.05.

The qualitative data obtained from the open-ended sections of the AIDSLINE forms were manually tabulated and included in the electronic database. A stratified random sample of these qualitative recordings for $3\,000$ randomly selected calls (T1 = $2\,000$; T2 = $1\,000$) was analyzed.

A general inductive approach described by Thomas (12) was used to analyze the qualitative data and to identify content categories that suggested unique needs of the caller. Based on multiple reviews of the data and discussions among the researchers (a psychiatrist, a psychologist, and a sociologist, all with experience in HIV research), various categories of content were determined. Categories were then combined to determine major themes. Consistency checks were carried out by an independent expert, who assigned a subsample of 100 comments from the AIDSLINE forms to the predetermined categories.

RESULTS

Number and source of calls

AIDSLINE received 7 046 valid (classified) calls during T1 and 2 338 during T2, indicating a 66% increase in the average number of valid monthly calls (from 118 ± 16 calls per month in T1 to 195 ± 42 calls per month in T2; P < 0.01). No seasonal or monthly pattern was determined with regard to the number of calls received over the two study periods. The vast majority of calls (99.78% in T1 and 100% in T2) were from citizens of Trinidad and Tobago.

Characteristics of callers

The mean age of an AIDSLINE caller in T1 was 30 years (±11; range 11 to 84

years). The median age was 29 years, and most calls (38.6%) came from the 20–29 year age group. In T2, the mean age had decreased to 27 years (\pm 9) and the median had decreased to 25 years. Both of these decreases were significant (P < 0.01). The decline was more marked among females than males. Table 1 compares selected national indicators with the findings of this study.

The male-to-female ratio among callers in T1 was 0.79; by T2, it had increased to 0.85. Both of these ratios were significantly lower than that of the comparable age group in the general population. The increase between the two study periods was not statistically significant, and there was no significant difference in age between the two sexes. In T1, there was a trend in the sex ratio toward more female callers in the older age groups (with 1.05 male versus female callers under age 15 compared to 0.8 male versus female callers among those 65 and over), similar to the ratio seen in

the general population. In T2, there was a significantly greater proportion of female callers versus male callers among those under age 15.

Among all hotline callers, 28.5% reported being married. Few callers revealed both marital status and known HIV status (for 89.7%, this information was either missing, not stated, or not applicable), and few revealed information about illicit drug use (not stated or missing among 95.4% in T1 and 95.3% in T2), and condom use (not stated or not applicable among 89.7% in T1 and 86.3% in T2). Of all 1 043 callers (T1+T2) that did provide information on condom use, 76.6% reported engaging in unsafe sex (with 53.4% reporting "no condom use" and 23.2% reporting that he/she "sometimes uses a condom").

Of all 429 callers (T1+T2) who gave information on illicit drug use, 28 reported positively (6.5%).

Between T1 and T2, the number of callers revealing their sexual preference/

orientation (n = 5 630 and 1 296 for the two study periods respectively) decreased from 79.9% to 55.4%. Among those who revealed this information, most described themselves as heterosexual (77.7% in T1 and 54.7% in T2). In T1, 2.1% of the callers reported homosexual behavior (1.5% homosexual and 0.6% bisexual), compared to 0.8% in T2 (0.6% homosexual and 0.2% bisexual). The small numbers in T2 precluded analysis, but of those who revealed sexual preference/orientation, the proportion of persons describing themselves as homosexual fell from 1.5% to 1.08%, while those self-described as bisexuals fell from 0.75% to 0.39%. Table 2 shows the data for callers who revealed both their sex and sexual preference/orientation (n = 5.504) and 1.292 for the two study periods respectively).

Table 3 shows the reported HIV status of callers during the two study periods. In both periods, females were more likely to report being HIV positive. This

TABLE 1. Comparison of callers to the National AIDS Hotline of Trinidad and Tobago (AIDSLINE) and the general population, 1998–2002 and 2007

| | Callers to AIDSLINE | | | | | |
|-----------------------------|--------------------------------|---------------------------|---------------------------------|---------------------------------|--|--|
| Characteristic | T1 (1998–2002) n = 7 046 | T2 (2007) n = 2 338 | T1 vs. T2 (<i>P</i> -value) | General population ^a | | |
| Median age (years) | 29 | 25 | 0.000 | 31.8 | | |
| Males | 29 | 25 | 0.000 | 31.3 | | |
| Females | 28 | 26 | 0.000 | 32.3 | | |
| Sex ratio (male-to-female) | 0.79 | 0.85 | 0.046 | 1.07 | | |
| Repeat callers By age group | 0.85 | 1.98 | 0.155 | NA ^b | | |
| <15 years | 1.05 | 0.4 | С | 1.06 | | |
| 15-64 years | 0.8 | 1.1 | С | 1.1 | | |
| >64 years | 0.8 | d | С | 0.81 | | |
| Confirmed HIV positive (%) | 6.0 | 3.4 | 0.0047 | 1.5 | | |

^a National statistic (CIA World Factbook 2008).

TABLE 2. Sexual preference/orientation of subsample of callers^a to the National AIDS Hotline of Trinidad and Tobago (AIDSLINE), by sex, 1998–2002 and 2007

| | | Female callers | | | | Male callers | | | |
|---|-------------|-------------------|-----|--------------|-------|-------------------|-----|--------------|--|
| T1 Sexual preference/ orientation No. % | T (1998- | T1 (1998–2002) | | T2 (2007) | | T1 (1998–2002) | | T2 (2007) | |
| | % | No. | % | No. | % | No. | % | | |
| Heterosexual | 3 076 | 98.8 | 707 | 99.6 | 2 275 | 95.1 | 568 | 97.6 | |
| Homosexual | 22 | 0.7 | 3 | 0.4 | 86 | 3.6 | 10 | 1.7 | |
| Bisexual | 15 | 0.5 | 0 | 0.0 | 30 | 1.3 | 4 | 0.7 | |

a Those who reported both their sex and their sexual preference/orientation (5 504 out of 7 046 callers in T1 and 1 292 out of 2 338 callers in T2).

^b NA = not applicable.

^c Numbers too small for statistical analysis.

^d Only age ranges with at least 10 callers were included.

| Self-reported HIV status ^a | , | 1 -2002) ' 046) | T2 (2007) (n = 2 338) | |
|---------------------------------------|-------|-----------------------|-----------------------------|------|
| | No. | % | No. | % |
| Living with AIDS | 11 | 0.2 | 0 | 0.0 |
| Don't know | 4 536 | 64.4 | 1 109 | 47.4 |
| HIV negative | 598 | 8.5 | 321 | 13.7 |
| HIV positive | 383 | 5.4 | 77 | 3.3 |
| Not applicable ^b | 524 | 7.4 | 62 | 2.7 |
| Not stated ^c | 994 | 14.1 | 769 | 32.9 |

TABLE 3. HIV status reported by callers to the National AIDS Hotline of Trinidad and Tobago (AIDSLINE) in 1998–2002 (T1) and 2007 (T2)

difference was significant in T1 (6.5% females versus 4.1% males; P < 0.01).

Of the 992 persons in T1 who revealed their HIV status, 38.6% were HIV positive without symptoms, 60.3% were HIV negative, and 1.1% had been diagnosed with AIDS. By comparison, in T2 (n = 398), 19.3% were HIV positive and 80.7% were HIV negative.

Among persons who described their sexual preference/orientation as heterosexual in T1 (including those who did not reveal gender), 315 of 5 474 reported being HIV positive (5.8%) while 532 reported testing negative (9.7%). In T2, 46 of 1 279 self-described heterosexuals reported being HIV positive (3.6%), and 281 (22%) reported testing negative.

In T1, HIV status was revealed by 27 out of 116 males who reported homosexual behavior (23.3%) and by 154 of 568 males self-described as heterosexuals (27.1%). Among the callers with self-described male homosexual behavior, 19 (70.4%) were known to be HIV positive, and eight (29.6%) had tested HIV negative. There was a significantly higher proportion of HIV-positive persons among callers with homosexual behaviors than among heterosexual callers.

During both study periods, most people who called AIDSLINE were doing so for the first time (78.8% in T1 and 83.4% in T2) and were calling on behalf of themselves (78% in T1 and 83.2% in T2). In T2, there was an increase in the male-to-female ratio among repeat callers (from 1.00 in T1 to 1.98 in T2). For both study periods, the percentage of callers who reported being HIV positive or having been diagnosed with AIDS was significantly lower among first-time callers (3.8% in T1 and 2.5% in T2) than among repeat callers (15.2% in T1, P < 0.01; 9.9% in T2, P = 0.06).

Reasons for calling

The standard form used by AIDSLINE operators to classify callers' reasons for requesting hotline information and counseling included seven predefined categories with four to nine subcategories each. In both study periods, across all age groups, and for both sexes, the most common reasons for calls to AIDS-LINE were 1) "HIV-related" (desire for information and counseling as a result of personal experiences with HIV infection) and 2) "transmission and prevention" (information-seeking to avoid contracting the disease). During T1, many callers also sought information about testing, medication, and treatment for STDs (mainly HIV). During T2, callers often expressed concern about STDs other than HIV. A side-by-side comparison of the two study periods, listing the number and proportion of calls classified according to the standard AIDSLINE categories, is shown in Table 4.

HIV-related calls. The most common need expressed by AIDSLINE callers (22.2% of calls in T1 and 52.2% of calls in T2; P < 0.01) was "wants HIV test." The ratio of callers that wanted an HIV test was relatively constant over each month of the years under review ($r_{\rm T1} = 0.85$; $r_{\rm T2} = 0.879$). Females tended to be more likely than males to want an HIV test during T1, but this trend was not statistically significant (P = 0.09).

In T1, 400 callers were concerned about being HIV positive (5.7% of all calls). Women were more likely to call about this concern than men (male-to-female ratio, 0.61; P < 0.01). There was a significant drop in calls for this reason in T2 (1.1%; P < 0.01).

The number of callers experiencing symptoms they feared were associated with AIDS decreased from 3.93% in T1 to 0.8% in T2. However, these numbers were too small for statistical evaluation or gender analysis. Among the 2 000 calls in T1 for which qualitative analysis was applied, symptoms that evoked this concern included blood in ejaculate, vaginal rash, tingling sensation on penis, and vaginal itching. When concern about AIDS was expressed in T2, the symptoms were also genital-related but were more likely to be known symptoms of HIV-related illness, including oral thrush, diarrhea, steady weight loss, and persistent lymph nodes.

In T1, 5.0% (n = 465) of all callers contacted the hotline because they had tested HIV positive. Females constituted a significantly greater proportion of these callers (male-to-female ratio, 0.36; P < 0.01). Only nine persons (0.4%) called the hotline for this reason in T2.

Transmission and prevention. For both study periods, more males than females called for information on HIV transmission and prevention (with a male-to-female ratio of 1.83 and 1.76, P < 0.01, for T1 and T2 respectively). The number of inquiries for each of the nine predefined subcategories for HIV transmission and prevention is shown in Table 4, by study period. In both T1 and T2, most inquiries for this category concerned the risk of HIV transmission through oral/anal sex and kissing.

For T1 cases in which open-ended comments were reviewed and qualitative analysis was carried out, queries about HIV prevention and transmission were wide-ranging, and included concerns about the risk of contracting the

^a Predefined options of the AIDSLINE data collection form.

^b Caller wanted information for educational purposes only.

^c Caller knew his/her status but did not reveal it.

TABLE 4. Frequency of reasons (number of times cited, proportion of total, and change over time) for valid calls at the National AIDS Hotline of Trinidad and Tobago (AIDSLINE), 1998-2002 and 2007

| | 1998–2002 | | 2 | 2007 | |
|--|--------------------|-------------------------------------|--------------------|-------------------------------------|-----------------------|
| Reason for calling | No. of times cited | % of all reasons cited ^b | No. of times cited | % of all reasons cited ^c | Increase/decrease (%) |
| HIV-related | | | | | |
| HIV+: "needs to talk" | 261 | 2.80 | 47 | 2.15 | -0.65 |
| HIV+: wants to know "how to cope" | 157 | 1.69 | 14 | 0.64 | -1.05 |
| Wants HIV test | 1 562 | 16.78 | 1 228 | 56.12 | 39.34 |
| Awaiting incubation period/results | 71 | 0.76 | 20 | 0.91 | 0.15 |
| Experiencing/believes has AIDS symptoms | 277 | 2.98 | 19 | 0.87 | -2.11 |
| Fears he/she is HIV+ | 400 | 4.30 | 26 | 1.19 | -3.11 |
| Tested HIV positive | 465 | 5.00 | 9 | 0.41 | -4.59 |
| Past partner HIV+/dead | 220 | 2.36 | 6 | 0.27 | -2.09 |
| Other | 305 | 3.28 | 140 | 6.40 | 3.12 |
| Subtotal | 3 718 | 39.95 | 1 509 | 68.96 | 29.01 |
| Other STDs ^d | 000 | 0.04 | 00 | 4.40 | 0.75 |
| Has/believes has STD | 206 | 2.21 | 32 | 1.46 | -0.75 |
| Wants information on STD | 91 | 0.98 | 180 | 8.23 | 7.25 |
| STD-infected by partner | 34 | 0.37 | 12 | 0.55 | 0.18 |
| Other | 53 | 0.57 | 6 | 0.27 | -0.30 |
| Subtotal Sexual behavior–related | 384 | 4.13 | 230 | 10.51 | 6.38 |
| Knows/fears partner unfaithful | 281 | 3.02 | 1 | 0.05 | -2.97 |
| | 11 | 0.12 | 32 | 1.46 | -2.97 1.34 |
| Had unprotected sex | 943 | | 52 50 | 2.29 | |
| Had sex with partner known/feared to be HIV+ Partner refuses to use condom | 188 | 10.13 2.02 | 3 | 0.14 | −7.84 −1.88 |
| Partner does not always use condom | 7 | 0.08 | 0 | 0.00 | -0.08 |
| Wants to know how to handle pressure to have sex | 49 | 0.53 | 1 | 0.05 | -0.08 -0.48 |
| Wants to know how to handle pressure regarding sexual preference | 2 | 0.02 | Ó | 0.00 | -0.48 -0.02 |
| Other | 49 | 0.53 | 0 | 0.00 | -0.53 |
| Subtotal | 1 530 | 16.45 | 87 | 3.99 | -12.46 |
| Transmission and prevention | 1 000 | 10.10 | O, | 0.00 | 12.10 |
| Modes of transmission | 637 | 6.84 | 166 | 7.59 | 0.75 |
| Methods of prevention | 106 | 1.14 | 31 | 1.42 | 0.28 |
| Transmission through casual contact | 110 | 1.18 | 10 | 0.45 | -0.73 |
| Transmission through kissing | 201 | 2.16 | 46 | 2.10 | -0.06 |
| Transmission through cuts/blood | 77 | 0.83 | 8 | 0.37 | -0.46 |
| Transmission through oral/anal sex | 326 | 3.50 | 69 | 3.15 | -0.35 |
| Occupational risk (health worker) | 20 | 0.22 | 2 | 0.09 | -0.13 |
| Transmission to blood donors | 4 | 0.04 | 1 | 0.05 | 0.01 |
| Other | 140 | 1.50 | 1 | 0.05 | -1.45 |
| Subtotal | 1 621 | 17.41 | 334 | 15.27 | -2.14 |
| Medication/treatment/tests/services | | | | | |
| Medication to use for HIV/other STDs | 52 | 0.56 | 10 | 0.45 | -0.11 |
| Where to get medication for HIV/other STDs | 67 | 0.72 | 10 | 0.45 | -0.27 |
| Home remedies for HIV/other STDs | 5 | 0.05 | 0 | 0.00 | -0.05 |
| Bush medicine ^e for HIV/other STDs | 4 | 0.04 | 0 | 0.00 | -0.04 |
| Location of HIV/other STD testing sites | 1 463 | 15.72 | 3 | 0.14 | -15.58 |
| Location of condom outlets | 16 | 0.17 | 0 | 0.00 | -0.17 |
| Other medication/treatment/tests | 72 | 0.77 | 1 | 0.05 | -0.72 |
| Subtotal | 1 679 | 18.03 | 24 | 1.09 | -16.94 |
| Human rights issues | 0 | 0.00 | | 0.05 | 0.00 |
| Workplace requires HIV testing before hiring | 3 | 0.03 | 1 | 0.05 | 0.02 |
| Workplace requires HIV testing of workers | 1 | 0.01 | 1 | 0.05 | 0.04 |
| Fired because known/suspected HIV+ | 1 | 0.01 | 0 | 0.00 | -0.01 |
| Discrimination against HIV+/gay/family of HIV+/CSWf/STD+ | 1 | 0.01 | 0 | 0.00 | -0.01 |
| Discrimination against other Other | 0 7 | 0.00 0.08 | 0 | 0.00 0.00 | 0.00 -0.08 |
| Subtotal | 13 | 0.08 | 2 | 0.00 | -0.08 -0.04 |
| Families and caretakers of PLWHA ^g | 13 | 0.14 | 2 | 0.10 | -0.04 |
| How to care for PLWHA | 137 | 1.47 | 0 | 0.00 | -1.47 |
| Risk to PLWHA caretaker | 93 | 1.47 | 0 | 0.00 | -1.47 -1.00 |
| Risk to household members of PLWHA | 93 77 | 0.83 | 0 | 0.00 | -1.00 -0.83 |
| Lost job through HIV-related chronic illness | 4 | 0.04 | 0 | 0.00 | -0.63 -0.04 |
| Insurance claims of PLWHA | 3 | 0.04 | 0 | 0.00 | -0.04 -0.03 |
| Nutritional needs of PLWHA | 15 | 0.16 | 0 | 0.00 | -0.03 -0.16 |
| Hospice inquiries | 33 | 0.36 | 2 | 0.00 | -0.16 -0.27 |
| Subtotal | 362 | 3.89 | 2 | 0.09 | -0.27 -3.80 |
| Oubiolai | 302 | 5.05 | 4 | 0.03 | -5.00 |

^a Calls classified by AIDSLINE operators according to predefined categories from AIDSLINE data collection form (4 456 out of 7 046 total calls in 1998–2002 and 1 733 out of 2 338 total calls in 2007).

b Total of 9 307 reasons (an average of 2.1 per call).
c Total of 2 188 reasons (an average of 1.3 per call).

d STDs = sexually transmitted diseases.

e Traditional medicinal knowledge and practices.

f CSW = commercial sex worker.

⁹ PLWHA = people living with HIV/AIDS.

disease via mosquito bites, heavy foreplay, fingering, lesbian sex, menstrual blood, semen in the toilet, tattooing, water from a burst sewer, "quickies" (brief, rushed sexual encounters), blood in ketchup, contact sports, dental tools, nail cutters, sex toys, and breast milk from HIV-positive mothers. Callers also inquired about the risk of contracting HIV through contact with shaving sets, plates, toilet paper, restrooms, roll-on deodorant, food, and clothing used or touched by infected persons; hand-shaking; massages; fondling; playing with an infected child; and being stuck with a sharp object.

Information was also sought on the effectiveness of using double condoms, not ejaculating, urinating frequently after intercourse, and washing after intercourse as methods of HIV prevention, and medication or blood replacement as a means of reversing a positive HIV status; the risks of condom use; and how to have sex safely with an HIV-positive person or a commercial sex worker.

During T2, the predominant query related to prevention and transmission was on the safety of non-coital sexual contact, including kissing, oral sex, body-to-body massages, and lap dancing. Queries were also raised about incidents involving the potential exchange of blood (e.g., being stuck by a used needle, exposed to a barber's razor, or bitten by a human).

No association between HIV status or sexual orientation and the type of information requested about HIV transmission and prevention was found in either study period.

Other categories of calls. The numbers of calls related to the five other categories defined by AIDSLINE were small and reflected no significant findings.

Referrals

There was a significant decline in the number of referrals made by AIDSLINE operators from T1 to T2 (71.8% to 61.2% of calls; P < 0.01). Most referrals were for HIV testing and evaluation/treatment of symptoms.

Qualitative results

A review of caller comments recorded by AIDSLINE operators in the openended section of the data collection

TABLE 5. Major categories of HIV-related needs based on open-ended comments of callers to the National AIDS Hotline of Trinidad and Tobago (AIDSLINE), 1998–2002

| Category | Example | | | |
|--|---|--|--|--|
| Risk assessment of personal experiences Questions about exposure risk Misconceptions about transmission | Caller wants information on risk of preventing/contracting HIV by/from: Pre-pubertal non-coital sexual abuse Oral sex Breast milk from HIV-positive individual in eye Burst condoms Rape Homosexual encounter Blood in ketchup Shaking hands with infected person Not ejaculating | | | |
| Support related to HIV exposure/testing/diagnosis Reassurance of confidentiality Results of testing Progress of illness Keeping in touch | Caller wants/provides: Reassurance of confidentiality Test results Information on reputation of testing sites Outcome of medical crises Regular updates on HIV illness Seasonal greetings | | | |
| Mental health counseling and other services Mental illness Bereavement Relational issues | Caller seeks help for/regarding: Symptoms of mental illness as an HIV+ Coping after a loved one dies of AIDS Marital problems Sexual dysfunction Spousal abuse Excessive masturbation Concern about appearance of genitalia | | | |
| Support related to disclosure of HIV+ status Communicating status to others Communicating risk factors to others | Caller seeks help from operator on/to/after: How to inform others of HIV+ status Reveal caller's HIV+ status to others Encourage others to reveal HIV+ status Disclose infidelity to partner Someone told him/her to call the hotline | | | |
| Information exchange with philanthropic individuals | Caller wants to discuss/report: Ways to curb the spread of HIV Articles on HIV in the media Wrong telephone number for hotline being distributed by the media | | | |

forms for the T1 study period revealed the need for HIV-related information and counseling in five main categories: risk assessment of personal experiences; HIV testing, exposure, and diagnosis; mental health; disclosure of HIV status; and information exchange with philanthropic individuals (queries and feedback from citizens concerned about people living with HIV/AIDS) (Table 5).

During T2, four major categories of needs were identified from caller comments: HIV testing and diagnosis; mental health; specific information related to HIV and other STDs (e.g., testing, symptoms, and risks); and issues related to children (sexual abuse, HIV, other STDs, AIDS) (Table 6).

DISCUSSION

This study examined the utilization of AIDSLINE and its effectiveness in iden-

tifying the HIV-related needs of callers. A comparison of the age and sex of AIDSLINE callers with national statistics for the general population suggests the hotline served the general population as well as people living with HIV/AIDS, with the latter group over-represented in both study periods. There were significantly more calls to the hotline from younger persons, particularly adolescent females, in T2 versus T1, indicating increasing awareness and positive action among this vulnerable subgroup, which registered a national prevalence of HIV infection six times higher than that of adolescent males in 2005 (13).

Overall, women were significantly more likely than men to call the hotline, in both study periods, with the male-to-female ratio of callers significantly lower than that in the general population. Among HIV-positive callers, women were also disproportionately represented,

TABLE 6. Major categories of HIV-related needs based on open-ended comments of callers to the National AIDS Hotline of Trinidad and Tobago (AIDSLINE), 2007

| Category | Example | | | | |
|--|--|--|--|--|--|
| Support related to HIV testing/diagnosis Reliability of testing Convenient testing Testing after risky sexual behavior Clarification of test results What to do after testing positive | Caller asks for: Testing locations close to home Venues for same-day results Reliability of specific laboratories Timing of test after risky behavior Meaning of the term "reactive" | | | | |
| Mental health counseling and other services HIV-specific Non-HIV-related | Caller seeks help to cope with: Partner demands for risky sex Addressing partner's infidelity Partner violence after testing positive Violence when addressing infidelity Pregnancy risk after unprotected sex Rape Thoughts of abortion | | | | |
| Specific information on HIV and other sexually transmitted diseases (STDs) | Caller asks about: Symptoms of specific STDs Risks of STDs Where to test for STDs Incubation period of HIV virus Significance of viral loads Viability of virus outside the body Accuracy of facts from lectures/Internet | | | | |
| Issues related to children HIV and other STDs AIDS Child sexual abuse | Caller seeks help for/regarding: HIV test after child sexually abused HIV+ child of relative who died of AIDS Coping with child's infection with HIV and other STDs Coping with child's AIDS symptoms | | | | |

supporting reports of gender disparities in the HIV/AIDS epidemic in Trinidad and Tobago (14). However, the study's findings on the sex and HIV status of repeat hotline callers suggest the sex ratios observed among all hotline callers may result not only from the feminization of the epidemic but also from gender disparity in help-seeking for HIV. Repeat callers appeared to have more serious health problems than one-time callers (an observation supported by the finding that there were four times as many HIVpositive people among the former group versus the latter), and a greater proportion of repeat callers versus one-time callers were men (with the male-tofemale ratio among the former group approaching, in 1998-2002, and exceeding, in 2007, that of the general population). Furthermore, in 1998–2002, women were more likely than men to express fears of being HIV positive, and to call the hotline because they had tested positive, whereas men were more likely to call the hotline because they had experienced symptoms feared to be AIDS. Together, these observations indicate that men are less likely than women to seek help for HIV in its early stages. Possible explana-

tions for this may be that men are more likely to deny a possible HIV-positive status, and may have more fatalistic attitudes or be more concerned about stigma and discrimination related to dominant gender norms, until the development of symptoms poses a real threat. These issues have been recorded among men in Africa (15, 16), where HIV transmission is primarily heterosexual and fueled in part by gender inequity (17), as it is in Trinidad and Tobago. Delayed helpseeking delays diagnosis, increases the risk of HIV transmission, and increases the cost of health care. It is therefore important to explore reasons for this behavior among men.

There was a significant drop in the number of persons who did not know their HIV serostatus between the two study periods (from 64% in T1 to 47% in T2). Low rates of HIV testing are driven by poor access to testing services and concerns about stigma (18–20). Both issues seemed to apply among callers in 1998–2002. Consistent with other AIDS hotline analyses (10, 21, 22), the majority of callers during T1 wanted an HIV test. The second most common reason for calling the hotline during that period

was to locate HIV/other STD testing outlets, suggesting that this information was not well known among the general population. By comparison, although the number of persons wanting an HIV test in 2007 increased significantly, the number of queries about the location of testing sites was negligible. Stigma and disclosure may have also been significant factors in the 1998-2002 time period, when queries were received from both HIV-positive and non-infected persons on how to facilitate communication about HIV and encourage help-seeking or disclosure. In 2007, no significant theme related to stigma and/or discrimination was identified, nor did callers seek reassurance about the confidentiality of the service as they had in the earlier study period. Therefore, the study findings suggest increased knowledge of HIV testing facilities among the general population, decreased fear of stigmatization, and increased HIV testing. However, compared to 1998-2002, in 2007, more than twice the proportion of persons calling the hotline chose not to reveal their HIV status, suggesting that some HIV stigma still existed.

As in other studies (10, 22), males were more likely than females to seek information on HIV transmission. The proportions of all callers seeking information about HIV transmission and prevention declined slightly from T1 to T2. Qualitative analysis revealed there were also changes in the types of misconceptions held by callers over the two study periods. During 1998-2002, callers did not seem knowledgeable about HIV/ AIDS symptoms, or how to interpret test results. In addition, despite a basic knowledge of how HIV is acquired and transmitted, most callers were not aware of the details of transmission. For example, many calls included inquiries about non-risky situations and how to use condoms safely. In 2007, there seemed to be fewer misconceptions with regard to transmission, and inquiries were more specific. Callers were concerned about risks of non-coital sexual behaviors and blood exchange. While earlier callers appeared to panic over perceived risky behaviors, fearing the possibility of infection, in 2007 the concerns were for quick, reliable, and convenient HIV testing after risky sexual behavior. There was no indication of any change in sexual behavior between the two study periods.

During the 1998-2002 period, HIV/ AIDS programs in Trinidad and Tobago aimed to increase awareness of HIV/ AIDS transmission and prevention (23) and reduce risky sexual behaviors. These efforts were conducted through educational campaigns, primarily focused on the "ABC" approach (abstinence, being faithful, consistent use of condoms). Since 2002, the Government of Trinidad and Tobago has provided free antiretroviral (ART) medication to all citizens, and improved access to treatment at specialized centers. In 2007, callers' inquiries about HIV were more informed, and there were marked reductions in the numbers of calls from HIV-positive persons, caregivers of persons living with AIDS, and persons needing referrals for testing or treatment. These findings point to increased awareness of HIV and availability of treatment resources.

Evidence of the apparent simultaneous lack of changes in risky sexual behavior despite increased awareness of HIV transmission points to the need to reevaluate the ABC approach as an appropriate strategy for HIV prevention. This is consistent with previous findings among Trinidadians that knowledge of HIV is associated with concern about personal risk of infection and condom possession but not consistent condom use (24), and supports the recommendation that HIV prevention programs should employ a poly-theoretical approach (24).

The observation of increased awareness of HIV transmission is consistent with reports from Trinidad and Tobago in 2006-2007 (25) that showed that before the 2005 implementation of the National AIDS Coordinating Committee youth prevention campaign "What's Your Position?" only 56% of 15-to-24 year olds correctly identified ways of preventing sexual transmission of HIV, whereas in 2007, 90% of those surveyed were able to identify six key measures to reduce HIV transmission (with no noticeable differences by age group). This suggests that programs to increase HIV awareness among the general population may not have been as effective among the youth as those specifically targeting young persons. AIDSLINE presents a convenient way of readily monitoring inadequate knowledge and misconceptions about HIV/AIDS in the general population, and providing information for the development and refining of prevention programs.

While the HIV epidemic in Trinidad and Tobago is classified as heterosexual, researchers acknowledge a simultaneous homosexual epidemic (26), and the elevated risk of HIV infection for men who have sex with men (MSM) (27, 28). This study limits discussion to self-described homosexual and bisexual men because only very small numbers of females reported homosexual behavior. However, the number of callers identifying themselves as MSM was sufficient for analysis only during the earlier period. Consistent with previous reports (27-29),4 MSM had significantly higher rates of HIV infection than those reporting exclusively heterosexual behavior, suggesting greater HIV risk.

The number of callers stating their sexual preference/orientation, and the proportion of those who stated it as homosexual or bisexual, declined from 1998-2002 to 2007. Because the proportion of MSM in the general population is unlikely to have changed between the two study periods, and there was no obvious change in societal attitude toward homosexual behavior, this finding may be attributed to budgetary allocations made to MSM support and advocacy groups in 2003 through the national HIV plan, which resulted in MSM-specific interventions for HIV education and support and thus a reduced need for the national hotline among this population.

These findings may also be explained by homophobia and forced heteronormativity in the population. Homophobia limits the inclusion of MSM in national HIV prevention interventions. Over the decade comprising the two study periods, in terms of public perception, HIV/ AIDS has been transformed from a homosexual disease to a heterosexual one. This may have created complacency among MSM with a tendency toward reduced HIV information- and helpseeking behavior. Simultaneously, management of the HIV epidemic provided the opportunity for discussions on human rights and sexual orientation. This focus on homosexual behavior in a homophobic society could increase the level of secrecy and forced heteronormativity as

MSM feel more threatened by persistent societal discrimination and potential violence. In turn, more secrecy, and complacency, increases the likelihood of HIV transmission between MSM (regardless of whether they acknowledge their sexual orientation) and heterosexual women. Therefore, there is a need for HIV prevention messages specifically targeted to the MSM population. This requires a reduction in homophobia and other cultural taboos that reduce the availability and effectiveness of prevention messages to this subpopulation.

Qualitative analysis of comments made by callers to AIDSLINE identified the need for mental health counseling and other services in both study periods. These needs included sustained support after HIV testing, and counseling related to bereavement and relational issues for HIV-positive persons and their relatives. Callers in 2007 more overtly reported inadequate coping as well as intimate partner violence (IPV) in response to situations of risky sexual contact and HIV diagnosis within relationships. The relationship between IPV and HIV risk has been previously reported (30, 31) but remains an area to be explored in Trinidad and Tobago.

Other callers reported symptoms suggestive of mental illness. Very little has been written about the mental health needs of HIV-positive persons in Trinidad and Tobago. In a study of HIVpositive persons attending a community support group, 78% of persons evaluated had a current psychiatric diagnosis and 41% had more than one diagnosis.⁵ There is a need to further explore the prevalence, timing, and associations of mental health symptoms among HIVpositive persons. The U.S. Centers for Disease Control and Prevention (CDC) National AIDS Hotline (32) noted that 16% of all calls were related to mental health. Other studies have shown the range of psychosocial problems associated with a positive HIV serostatus (33, 34) that require specific intervention beyond the post-test phase.

In 2007, AIDSLINE documented direct and indirect expressions of concerns about the risk of HIV transmission to victims of child sexual abuse (CSA)

Lee RK, Poon King C, Legall G, Trotman C, Samiel S, O'Neil C. Risk behaviours for HIV among men who have sex with men in Trinidad and Tobago. Int AIDS Conf. 2006: abstract no. CDD0366. Available from: http://www.iasociety.org/Default.aspx?pageId=11&abstractId=2198563.

Reid SD, Nadathur S, Clarke N, Fifi A, Peters J, Chang Kit A, et al. Prevalence of psychiatric symptoms among HIV-positive persons attending a support group. Unpublished manuscript; 2003.

through queries about testing for HIV and other STDs after sexual molestation, and reports of children diagnosed as HIV positive within a family where an older relative had died of AIDS, respectively. This raises the important issue of the relationship between CSA and HIV infection. No studies have documented this association in Trinidad and Tobago, but it has been reported in Jamaica (35). Investigating this association is difficult (36), but this study's findings indicate a need to explore the relationship between CSA and HIV in Trinidad and Tobago.

This study concludes that an analysis of calls to Trinidad and Tobago's AIDS-LINE between 1998 and 2002, and in 2007, establishes the hotline as a useful and well-utilized vehicle for providing accurate information, clarifying misconceptions, and providing counseling for the general population as well as those infected with the HIV virus. The hotline does this in an anonymous, confidential, nonjudgmental, and personal manner and can therefore play a vital role in HIV/AIDS education and prevention for all sectors of the population.

The analysis of calls between 1998 and 2002 identified several areas of HIV management requiring improvement. Independent of any review of the hotline data, Trinidad and Tobago's National HIV/AIDS Strategic Plan (January

2004–December 2008) focused on the same issues identified by the AIDSLINE analysis, providing evidence that the hotline is a valid source of information on the HIV epidemic.

By comparing calls made to AIDS-LINE from 1998 to 2002 with those made during 2007, this study documented trends in the epidemic and changes in HIV-related concerns and needs. It also identified other areas that have yet to capture the attention of HIV/AIDS program planners.

Public health professionals and policymakers must have ready access to information on the needs of the public for effective management of the HIV epidemic. Major barriers to information access include time, resource reliability, and trustworthiness/credibility of information (37). Using AIDSLINE as a source of information is a fast, convenient, and low-cost way of obtaining the information that is needed for HIV policy-making and program planning. This study shows that AIDSLINE provides valid, relevant data, including information that may not be available from other sources. Continuous analysis of calls made to the hotline allows for the early detection of trends and needs, facilitating betterfocused decision-making. Because AIDS-LINE callers represent the general population as well as the community living with HIV/AIDS, the information gathered by the hotline is relevant to general as well as HIV policy-making. Data are collected continuously by AIDSLINE as an integrated part of the routine service and are therefore cost-effective and easily accessible.

This study had several limitations, including the small size of the sample selfreported as members of populations at high risk for HIV. The minimal number of callers who gave information on condom use, drug use, and homosexual behaviors did not allow for adequate exploration of the specific information needs and concerns of HIV-vulnerable groups. In addition, the data recorded in the AIDSLINE form did not provide sufficient information for categorizing callers' risk, and there were problems with the way calls were classified, as many subject areas overlapped. The assumptions that the self-report of sensitive information was accurate and that the training of AIDSLINE operators was consistent over the two study periods could also be considered study limitations.

Acknowledgments. The researchers wish to thank Professor Courtenay Bartholomew, Chairman of AIDSLINE, and Mrs. Helena Joseph, voluntary AIDSLINE coordinator, for their support in conducting this project.

REFERENCES

- Central Intelligence Agency (US). CIA world factbook 2008. Central America and Caribbean: Trinidad and Tobago. New York: Skyhorse Publishing; 2007.
- Joint United Nations Programme on HIV/ AIDS; World Health Organization. UNAIDS/ WHO epidemiological fact sheet on HIV and AIDS. Core data on epidemiology and response. Trinidad and Tobago. 2008 update. Geneva: UNAIDS/WHO; 2008.
- Narain JP, Hull B, Hospedales CJ, Mahabir S, Bassett DC. Epidemiology of AIDS and HIV infection in the Caribbean. Bull Pan Am Health Organ. 1989;23(1–2):42–9.
- 4. Henry G, Chong J, Bratt DE, Cameron E. Paediatric acquired immunodeficiency syndrome (PAIDS) in Trinidad and Tobago. West Indian Med J. 1990;39(3):174–7.
- Henry R, Newton E. AIDS costs in Trinidad and Tobago. Stud Comp Int Dev. 1994;29(4):68–89.
- Baird DS, Yearwood EL, Perrino CS. Small islands, big problem: HIV/AIDS and youth in Trinidad and Tobago. J Child Adolesc Psychiatr Nurs. 2007;20(4):243–51.
- 7. Ransome D. Prevention and care: Trinidad's twin messages. AIDS Watch. 1990;(9):5–7.

- 8. Lewis L. Exploring the intersections of gender, sexuality, and culture in the Caribbean: an introduction. In: Lewis L, editor. The culture of gender and sexuality in the Caribbean. Gainesville (FL): University Press of Florida; 2003. p. 1–21.
- Kempadoo K. Sexing the Caribbean: gender, race and sexual labor. New York: Routledge; 2004.
- Kalichman SC, Belcher L. AIDS information needs: conceptual and content analyses of questions asked of AIDS information hotlines. Health Educ Res. 1997;12(3):279–88.
- 11. Cardiff Software introduces TELEform Elite: high performance data collection system combines existing form recognition with electronic filler; powerful new addition to Teleform line targets companies processing 2,500–25,000 forms daily [press release]. Business Wire. 1996 Apr 1 [cited 2009 Sept 7]. Available from: http://www.highbeam. com/doc/1G1-18146881.html.
- 12. Thomas DR. A general inductive approach for qualitative data analysis. Auckland: University of Auckland; 2003 [cited 2006 Feb 16]. Available from: http://www.fmhs.auckland.

- ac.nz/soph/centres/hrmas/_docs/Inductive 2003.pdf.
- Inciardi JA, Syvertsen JL, Surratt HL. HIV/ AIDS in the Caribbean Basin. AIDS Care. 2005;17 Suppl 1:S9–25.
- 14. Joint United Nations Programme on HIV/ AIDS; World Health Organization. UNAIDS/ WHO epidemiological fact sheets on HIV/ AIDS and sexually transmitted infections. Trinidad and Tobago. 2004 update. Geneva: UNAIDS/WHO; 2004 [cited 2008 Aug 18]. Available from: http://data.unaids.org/ Publications/Fact-Sheets01/trinidad-tobago_ en.pdf.
- 15. Kalichman SC, Simbayi LC. HIV testing attitudes, AIDS stigma, and voluntary HIV counselling and testing in a black township in Cape Town, South Africa. Sex Transm Infect. 2003;79(6):442–7.
- Pearson S, Makadzange P. Help-seeking behaviour for sexual-health concerns: a qualitative study of men in Zimbabwe. Cult Health Sex. 2008;10(4):361–76.
- 17. Beyrer C. HIV epidemiology update and transmission factors: risks and risk contexts—16th International AIDS Conference epidemi-

- ology plenary. Clin Infect Dis. 2007;44(7): 981–7. Epub 2007 Feb 26.
- deGraft-Johnson J, Paz-Soldan V, Kasote A, Tsui A. HIV voluntary counseling and testing service preferences in a rural Malawi population. AIDS Behav. 2005;9(4):475–84.
- 19. Hutchinson PL, Mahlalela X. Utilization of voluntary counseling and testing services in the Eastern Cape, South Africa. AIDS Care. 2006;18(5):446–55.
- Bwambale FM, Ssali SN, Byaruhanga S, Kalyango JN, Karamagi CA. Voluntary HIV counselling and testing among men in rural western Uganda: implications for HIV prevention. BMC Public Health. 2008;8(1):263. doi:10.1186/1471-2458-8-263.
- 21. Scott SA, Jorgensen CM, Suarez L. Concerns and dilemmas of Hispanic AIDS information seekers: Spanish-speaking callers to the CDC National AIDS hotline. Health Educ Behav. 1998;25(4):501–16.
- 22. Bos AE, Visser GC, Tempert BF, Schaalma HP. Evaluation of the Dutch AIDS information helpline: an investigation of information needs and satisfaction of callers. Patient Educ Couns. 2004;54(2):201–6.
- Marquez PV, Sierra VH, Gayle J, Crown R, Griffin C. HIV/AIDS in the Caribbean: issues and options. Report No. 20491-LAC. Washington: World Bank; 2000.
- Norman LR, Carr R. The role of HIV knowledge on HIV-related behaviours: a hierarchical analysis of adults in Trinidad. Health Educ. 2003;103(3):145–55.
- Office of the Prime Minister, National AIDS Coordinating Committee (TT). UNGASS coun-

- try progress report: Trinidad and Tobago. Reporting period: January 2006–December 2007. Port of Spain: NACC; 2008 [cited 2008 Aug 25]. Available from: http://data.unaids.org/pub/Report/2008/trinidad_and_tobago_2008_country_progress_report_en.pdf.
- Caribbean Epidemiology Centre; Pan American Health Organization; World Health Organization. Homosexual aspects of the HIV/AIDS epidemic in the Caribbean: a public health challenge for prevention and control. Port of Spain: CAREC/PAHO/WHO; 2006.
- Bartholomew C, Saxinger WC, Clark JW, Gail M, Dudgeon A, Mahabir B, et al. Transmission of HTLV-I and HIV among homosexual men in Trinidad. JAMA. 1987;257(19):2604–8.
- Baral S, Sifakis F, Cleghorn F, Beyrer C. Elevated risk for HIV infection among men who have sex with men in low- and middle-income countries, 2000–2006: a systematic review. PLoS Med. 2007;4(12):e339.
- Dougan S, Payne LJC, Brown AE, Fenton KA, Logan L, Evans BG, et al. Black Caribbean adults with HIV in England, Wales, and Northern Ireland: an emerging epidemic? Sex Transm Inf. 2004;80(1):18–23.
- Maman S, Campbell J, Sweat MD, Gielen AC. The intersections of HIV and violence: directions for future research and interventions. Soc Sci Med. 2000;50(4):459–78.
- Dunkle KL, Jewkes RK, Brown HC, Gray GE, McIntryre JA, Harlow SD. Gender-based violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. Lancet. 2004;363(9419):1415–21.

- 32. Safran MA, Waller RR. Mental health–related calls to the CDC National AIDS Hotline. AIDS Educ Prev. 1996;8(1):37–43.
- 33. Joseph EB, Bhatti RS. Psychosocial problems and coping patterns of HIV seropositive wives of men with HIV/AIDS. Soc Work Health Care. 2004;39(1–2):29–47.
- Catalan J, Beevor A, Cassidy L, Burgess AP, Meadows J, Pergami A, et al. Women and HIV infection: investigation of its psychosocial consequences. J Psychosom Res. 1996; 41(1):39–47.
- Lowe GA, Gibson RC, Christie CDC. HIV infection, sexual abuse and social support in Jamaican adolescents referred to a psychiatric service. West Indian Med J. 2008;57(3):307–11.
- Gutman LT, Herman-Giddens ME, McKinney RE Jr. Pediatric acquired immunodeficiency syndrome: barriers to recognizing the role of child sexual abuse. Am J Dis Child. 1993; 147(7):775–80.
- 37. Revere D, Turner AM, Madhavan A, Rambo N, Bugni PF, Kimball A, et al. Understanding the information needs of public health practitioners: a literature review to inform design of an interactive digital knowledge management system. J Biomed Inform. 2007;40(4):410–21. Epub 2007 Jan 11.

Manuscript received on 8 June 2009. Revised version accepted for publication on 17 September 2009.

RESUMEN

Cambios en las necesidades relacionadas con el VIH identificadas por la Línea Directa Nacional de Trinidad y Tobago sobre Sida

Objetivos. Evaluar la utilización de la Línea Directa Nacional de Trinidad y Tobago sobre Sida (AIDSLINE) y su validez como fuente confiable de información para monitorear las necesidades nacionales sobre el VIH, e identificar cambios en las preguntas de los usuarios en dos momentos diferentes.

Métodos. Se buscaron asociaciones entre las características de los usuarios y el contenido de 7 046 llamadas anónimas recibidas entre 1998 y 2002 (T1) y 2 338 recibidas en 2007 (T2). Se tomó una submuestra para análisis cualitativo. Se compararon las características de las llamadas de T1 con: 1) los datos de la autoridad nacional sobre la infección por VIH en ese período, para evaluar la validez de AIDSLINE como fuente de información, y 2) con las de T2 para revelar los cambios en el contenido de las llamadas en el tiempo.

Resultados. En T1, AIDSLINE se utilizó ampliamente para buscar información y consejería, tanto por la población general como por personas con VIH/sida. El contenido de las llamadas en T2 indicó un incremento con respecto a T1 en: 1) preocupación general sobre el VIH y otras enfermedades de transmisión sexual; 2) detección de la infección por el VIH; y 3) información sobre los síntomas de la infección y su transmisión. Se identificaron como preocupaciones emergentes las necesidades en salud mental relacionadas con el VIH y la relación entre esta infección y el abuso sexual de menores (ASM) y la violencia de pareja (VDP).

Conclusiones. AIDSLINE es una herramienta ampliamente utilizada para brindar información y consejería sobre el VIH en el país y una fuente de información válida, efectiva en función del costo y de fácil acceso para los encargados de planear y elaborar políticas relacionadas con el VIH. Con respecto a T1, en T2 aumentaron la preocupación por el VIH y su detección y las preguntas sobre la salud mental, el ASM y la VDP, pero sin cambios en cuanto a la conducta sexual.

Palabras clave

VIH; enfermedades de transmisión sexual; monitoreo; líneas directas; Trinidad y Tobago.