

The South African National AIDS Helpline: Call Trends from 2000-2003

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Telephone helplines have been used for HIV/AIDS information, referral and counselling purposes for several years and now exist in many countries. In addition to providing a valuable public service, telephone helplines have the potential to provide a rich source of data for social research. This study offers a quantitative analysis of calls made to the national AIDS Helpline in South Africa over a three year period. The Helpline has operated since 1992, providing information, counselling and referrals to callers in all 11 South African languages. Analysis of Helpline data capture forms found that the overall volume of calls to the Helpline has declined over time, but that a growing proportion of the calls are for counselling, rather than basic information. Seventy-five percent of callers are under 30 and a growing proportion of callers are disclosing their HIV status. Analysis of Helpline call and caller trends can be utilised to inform HIV/AIDS communication policy.

Telephone helplines have been used for HIV/AIDS information, referral and counselling purposes for several years and now exist in many countries. Telephone helplines have been shown to be an effective educational and support resource for a variety of medical and psychological issues (Wellman, 1993).

Helplines can play an important role in providing information and/or clarifying information or instructions that a caller may have received elsewhere and not properly understood. They therefore help to educate the public and to dispel myths or misunderstandings on specific issues. The fact that calls to most telephone helplines are anonymous is particularly important, as it encourages individuals who might be hesitant to seek advice on personal matters in a 'face to face' setting to receive information or counselling. In addition to providing general counselling and support, many telephone helplines also refer callers to service providers or other resources in their local communities, thereby allowing the caller to access more comprehensive and sustained assistance should they choose to do so.

Telephone helplines can yield valuable data for social research, including data on the changing profiles of callers over time and the particular

concerns that are raised during calls. This information can be used to guide strategies and policies, and to improve the provision of external services.

There are a number of advantages to using helpline data for social research. First, such data is likely to be continuous over time, as opposed to the 'snapshot' data available from periodic behavioural surveys. Second, it is relatively easy to collate helpline data and to process it, particularly in call centres that employ computerised datasheets to track incoming calls.

Helpline data also has limitations. Survey-type questions are not asked of helpline callers, and the type of data that can be gathered is limited to basic demographic information, as well as general information about call themes and topics. Callers to helplines are also not representative of the general

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population – rather they are individuals with particular information needs or ‘problems’, who are proactive about seeking information.

The South African AIDS Helpline

The national AIDS Helpline was established by the South African Department of Health, in partnership with Life Line, in 1992. The Helpline provides basic information and counselling on HIV/AIDS in all 11 South African languages and utilises a referral database to direct callers to local service providers as needed – for example, face-to-face counselling, condom distribution points, Voluntary Counselling and Testing (VCT) services and clinical services.

The Helpline service developed gradually, with individual Life Line centres providing helpline services on a rotating basis with the assistance of volunteer counsellors. In 1998, expanded promotion of the AIDS Helpline was brought into the ambit of the national Beyond Awareness Campaign and the Helpline number was integrated into the national AIDS logo. As call rates escalated, the Department of Health, the Beyond Awareness Campaign, Life Line and Johns Hopkins University Center for Communications Programs/USAID worked together to introduce a centralised facility that included higher line capacity, full-time salaried counsellors, centralised training, standardised information support, and service provision in all languages. The new call centre was established in Johannesburg in 2000 with the capacity to handle 24 incoming calls at a time and the ability to track calls through a computerised call logging system (Parker et al 2004).

The Helpline is promoted through both national-level campaigns and at provincial and local levels. The Helpline number is publicised on some mass media advertisements and small media products through the Khomanani Campaign, the national public sector HIV/AIDS awareness initiative which began in 2001. It was also widely promoted during the Beyond Awareness Campaign (1998-2000), in which the number was included in a series of Helpline-specific radio advertisements, as well as on all campaign materials including billboards, leaflets and posters. Apart from national campaigns, the Helpline is also promoted as part of provincial government activities, as well as by non-governmental, community-based and private sector organisations.

Data Sets

This report is based mainly on the analysis of datasheets for calls made to the AIDS Helpline from July 2000 to October 2003, a period of three years and three months. A distinction is made between total

calls to the Helpline (which may include calls that do not get answered), calls that are made to the Helpline but are determined to be prank or hoax calls or wrong numbers, and genuine calls (which include calls typically over one minute in duration and which involve the provision of basic information, referral information or counselling). This report reviews data relating to the 612,232 genuine calls received at the Helpline during the period of review.

For each genuine call, operators complete a computerised datasheet indicating the caller’s age, gender, language, province and HIV status (as reported by the caller), as well as the type of call (informational or counselling), the subjects raised in the call, whether it is the first time the caller has phoned the Helpline, whether the caller was referred on to other organisations, and the caller’s source of information about the Helpline.

Call data is also captured electronically via the computerised PABX system. This includes technical details of each call, including call duration and calls not answered. Although this dataset was not directly accessed, some figures from it are used in this report, based on a secondary source.

In addition to the Helpline data, data on promotional activities of the Khomanani Campaign were also gathered, with the review focussing specifically on television and radio advertising, some of which included the Helpline number. Six Helpline operators were interviewed in January 2004 with a view to obtaining additional insights into the data capture process.

Data analysis

Two approaches were used to analyse the Helpline data. First, all the variables for calls to the Helpline during the period August to October 2003 were examined in order to understand the recent profile of calls and callers, as well as callers’ sources of information about the Helpline. This analysis provided a ‘snapshot’ view of the Helpline in late 2003.

Second, a longitudinal analysis of the data was

Figure 1: Number of genuine calls in each period

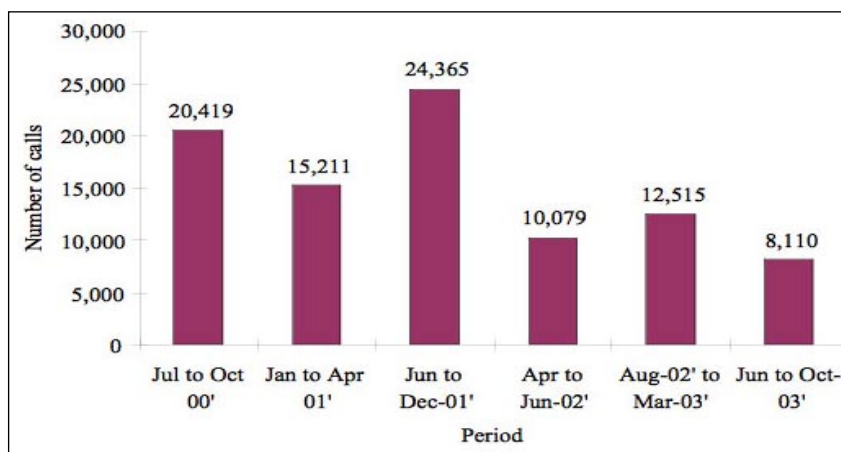


Table 1: Periods of the study

Period	Dates
First	July to October 2000
Second	January to April 2001
Third	June to December 2001
Fourth	April to June 2002
Fifth	August 2002 to March 2003
Sixth	June to October 2003

conducted for the entire period, July 2000 to October 2003. For purposes of analysis the total period was divided into six time periods (Figure 1; Table 1). These periods were chosen so as not to overlap, and gaps between periods range from one to three months. By sub-dividing the period into smaller sections, it was hoped that both long-term trends and short-term phenomena could be observed.

It is noted that there may be limitations to the data in terms of the way it is captured. Each caller to the Helpline is asked their gender, age, language and the province from which they are calling. This information is entered into the computerised datasheet, which has as its default setting (i.e. first checkbox on the list) male, Afrikaans speaker, Eastern Cape. This default setting may contribute to an over-attribution in these categories and this potential bias has been borne in mind during data analysis.

Assessment of language of callers using the data capture form was problematic for analysis. Many South Africans speak more than one official language, and a large proportion are also proficient in English. Consequently, it was difficult to determine whether callers received information in their preferred language.

Findings

Overall call volumes

Between May 2001 and December 2003, a total of 5,351,086 calls were registered on the system. For technical reasons, not all calls were registered during some periods and it is estimated that the actual number of received calls is probably closer to 7,000,000.

Based on actual calls registered, the Helpline received an average of 201,476 calls per month, although average calls per month ranged from 98,307 to 392,667 (Figure 2).

Calls are categorised into one of four groups:

- Lost calls

- Unlogged calls
- Hoax calls
- Genuine calls

The distribution of calls, by type, over time is shown in Figure 3. Lost calls are defined as calls that are not answered. Between May 2001 and December 2003, 22.8% of calls were lost. The proportion of lost calls has decreased considerably over time, from 33% during May-December 2001 to 9% during May-December 2003.

Unlogged calls refer to calls that are answered, but not captured on the call sheets. Approximately one-fifth of the calls (20.5%) are not logged into the system. There are three possible explanations for this. First, calls with a duration of less than one minute are not logged. Second, answered calls are sometimes lost when being transferred from the frontline operators (who filter calls) to the counsellors. Third, counsellors do not always log every call, either due to tardiness or because the time between incoming calls is too short to allow for the datasheets to be completed.

The proportion of answered, unlogged calls

Figure 2: Call flows, April 2001 to October 2003

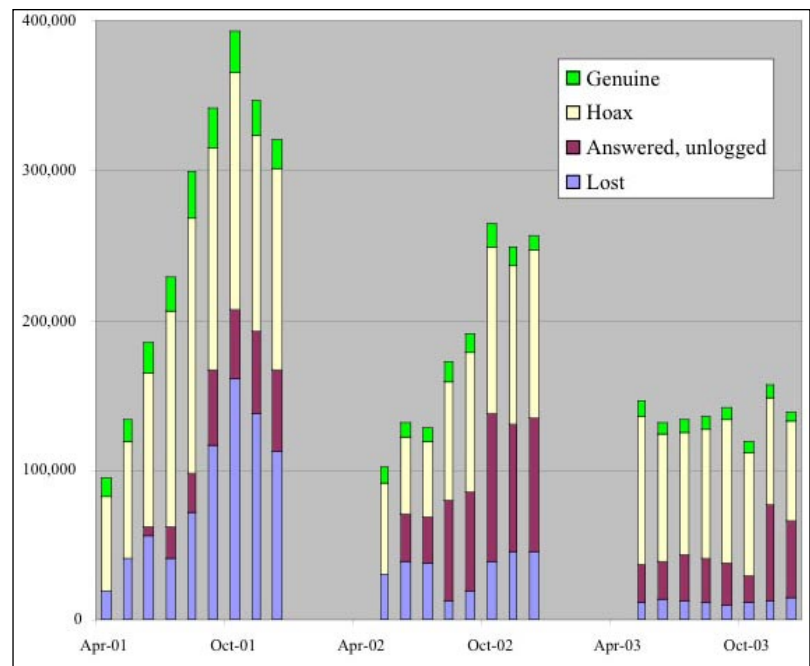


Figure 3: Total distribution of calls by type, May 2001 to Dec 2003

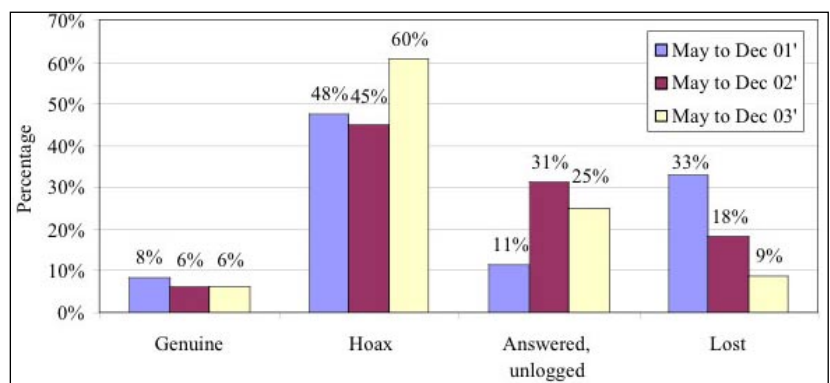
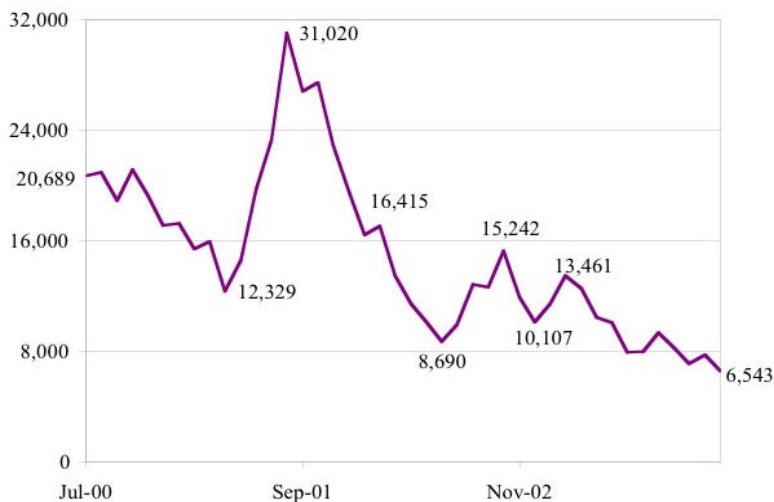


Figure 4: The number of genuine calls, July 2000 to Oct 2003



increased sharply from May-December 2001 (11%) to May- December 2002 (31%), but then decreased again to 25% in May-December 2003 (Figure 3). While it is unclear why there was a sharp increase, the decrease may be a result of an increase in the number of calls for counselling, which are longer in duration than those requesting information alone. The longer call duration increases the chance that the call will be logged into the system.

The third category refers to hoax calls. Of all captured calls, 86% were classified as hoax calls. A sharp increase in hoax calls as a proportion of overall calls was seen between May-December 2002 (45%) and May-December 2003 (60%) (Figure 3).

Hoax calls are typical amongst tollfree lines in South Africa. The nature of hoax calls varies, but includes silent callers, children playing on the line, abusive callers and wrong numbers. Such calls are demotivating to counsellors, waste time, and are costly overall. Possible approaches to diminishing hoax calls have been explored (UNAIDS 2002) and include the possibility of classifying hoax calls by category to allow for a better understanding of the distribution of types of hoax calls, and using such data to develop a response strategy. Another option is to employ a Caller Line Identity system to assess the provenance of calls and to block calls repeatedly made from the same number.

The fourth category includes genuine calls – defined as answered calls in which information, referral and/or counselling is provided to the caller. Figure 4 shows the number of genuine calls received by the Helpline between July 2000 and October 2003.

The number of genuine calls fell from 20,689 during July 2000 to 12,329 in April 2001.¹ The April 2001 call rate had more than doubled by August 2001, reaching an all-time peak of 31,020 calls. This increase was followed by a decrease to 8,690 calls in June 2002. Between July 2002 and April 2003, the number of calls fluctuated between 10,107 and 15,242. Thereafter the number of calls declined,

reaching the lowest recorded level for the whole review period during the last month under study – December 2003 – with 6,543 calls.

As Figure 3 shows, the percentage of genuine calls among overall calls decreased from 8% in May-December 2001 to 6% in May-December 2002, after which it stabilised.

Caller profiles

Age Profile

The age profile of callers to the Helpline between August and October 2003 is presented in Figure 5. During this period, almost half the callers (48%) were between 20 and 29 years old. Almost a quarter

(23%) were between the ages of 15 and 19, while 17% were between 30 and 39. The remaining 13% of callers were either over 39, under 15, or did not report their age.

Between July 2000 and October 2003, the age profile of callers to the Helpline changed, as shown in Figure 6. The proportion of 15-19 year olds almost halved between the first and last periods (from 44% to 23%). The proportion of callers in the 20-29, 30-39, and 40+ age groups, on the other hand, increased over the same time span (38% to 48%, 6% to 16%, and 1.4% to 4%, respectively).

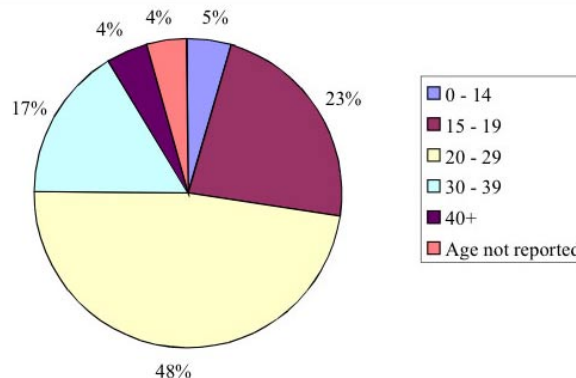
Although the age profiles of callers became older over time, the majority of callers (75%) remain under the age of 30.

Spatial distribution

An examination of the spatial distribution of the calls shows that slightly more than half of the calls came from Gauteng (33%) and KwaZulu-Natal (19%) (Figure 7). The smallest proportion of calls came from Northern Cape (1.7%) and Western Cape (4.7%).

When comparing the proportion of calls from each province with the proportion of the overall population which resided in each province in 2001, differences can be noted (Figure 8). Callers from

Figure 5: Age profile of callers, Aug-Oct 2003



Gauteng and Free State were over-represented compared to their proportion in the 2001 census (Statistics South Africa, 2003). The opposite was true in the cases of Western Cape, Limpopo, Mpumalanga, and KwaZulu-Natal. The proportion of calls from the Eastern Cape is likely to be an overestimation, due to the fact that it is the default setting on the data capture sheet.

Call rates by province are influenced by the demand for the service, the intensity of regional promotion of the Helpline and, to lesser extent, telephone access (noting that in many instances callers would also require discrete and private access if they are to discuss personal matters relating to HIV/AIDS, and access for relatively long periods if they require counselling).

The proportion of calls from each province varies considerably over the six periods examined. Five provinces showed an overall decrease (Eastern Cape, Free State, Mpumalanga, Limpopo, and North West), the proportion of calls from the Northern Cape remained stable across the periods, and three provinces showed increases (Gauteng, KwaZulu-Natal, and Western Cape).

HIV status

Between August and October 2003 one-third of the callers disclosed their HIV status (without necessarily being specifically asked to do so). Of those who disclosed their HIV status, slightly less than half said they were HIV positive.

First-time callers (74% of all callers) were less likely to report their HIV status than non-first time callers (30% to 50%, respectively). Non-first time callers were more likely to report themselves as HIV-negative than first-time callers (32% compared to 15%).

As shown in Figure 9, the proportion of people disclosing their HIV status (positive or negative) to counsellors during calls to the Helpline has increased over time, from a total of 17% in July-October 2000 to 35% in June-October 2003. The proportion of self-reported HIV-positive people has also increased over time, from 7% in July-October 2000 to 16% in June-October 2003.

Call profiles

Types of calls

Types of calls received by the Helpline are classified into two major categories. The first – informational calls – are situations where callers ask for information, including referral, without requiring an in-depth response. The second – counselling calls – are calls in which personal issues are raised.

From August to October 2003, slightly more than half of all calls (55%) were

Figure 6: Distribution of age groups per period

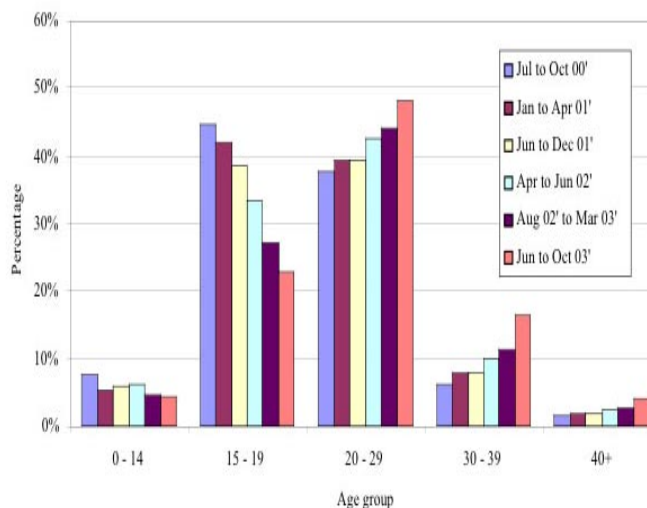
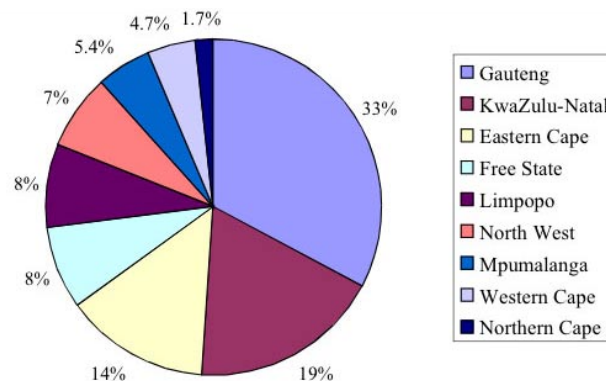


Figure 7: Distribution of callers by province



informational, while the remainder (45%) were counselling calls. Beginning in October 2002, however, a general trend of increasing counselling calls to the Helpline can be detected. The proportion of counselling calls in the final period of review (June-October 2003) was considerably larger than in the penultimate period of review (August 2002-March 2003) – 44% to 29% respectively (Figures 10 and 11).

Figure 8: Proportion of callers to helpline by province, in relation to South African population, Aug-Oct 2003

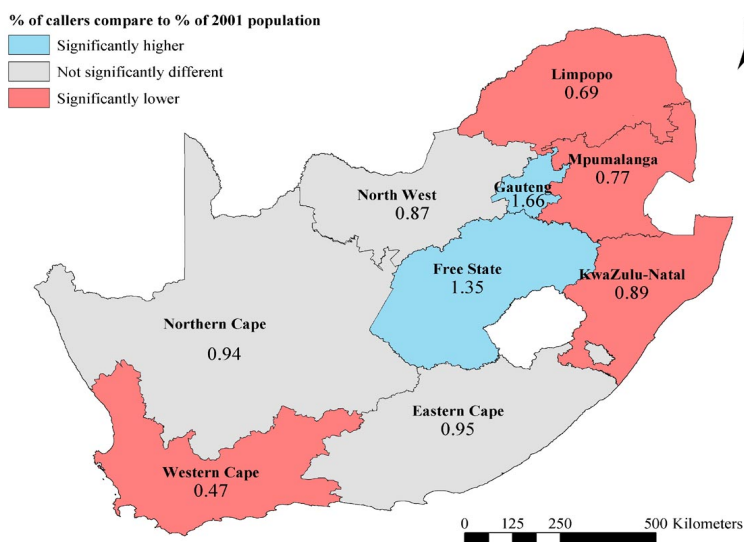


Figure 9: Proportion of HIV-positive callers by time period, July 2000 to October 2003

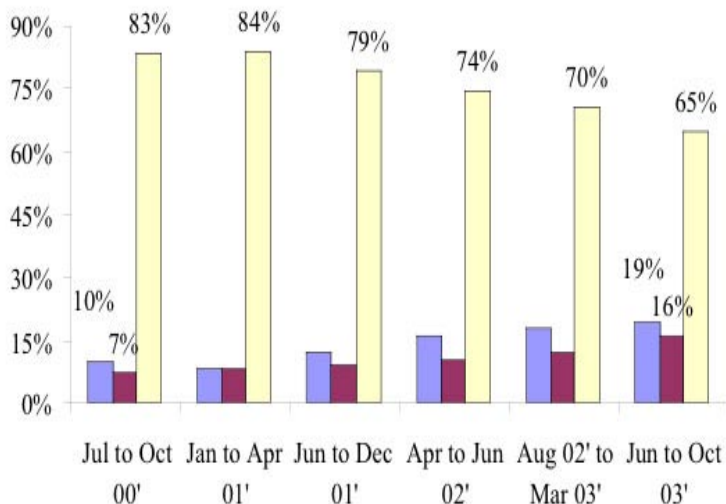


Figure 10: Counselling calls per time period

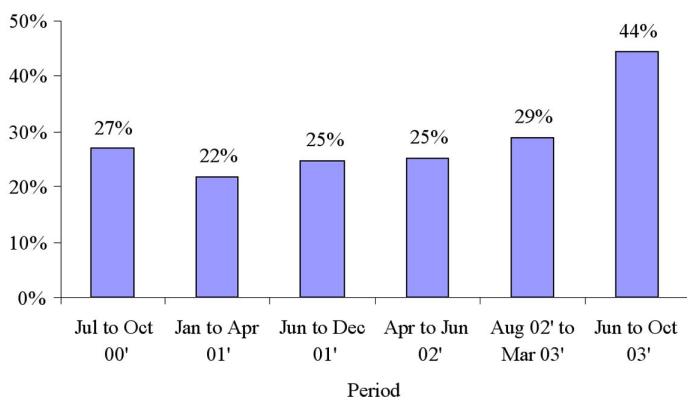


Figure 11: Counselling calls per month

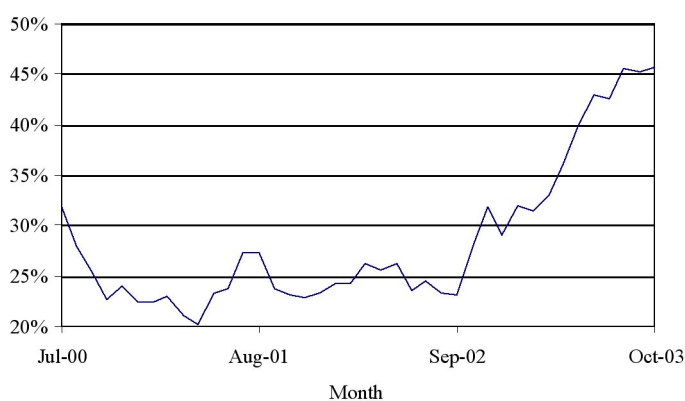


Table 2: Categories of subjects raised by callers

Information	Prevention	HIV-testing	Living with AIDS	Other
HIV/AIDS information Symptoms Transmission STIs TB Myths	Condoms Prevention	HIV-testing	Treatment Child Care Home-based care Support Legal/Human rights	Sexual abuse Relationships Other

Differences were noted across age groups, with those older than 30 tending to ask for counselling more than callers under the age of 30 (Figure 12). Among self-reported HIV-positive callers, 71% of calls were for counselling and 29% were for information. The opposite relationship was true among self-reported HIV-negative callers (57% of calls for information, 43% for counselling) and those who did not disclose their status (60% of calls for information, 40% for counselling).

The content of calls

Subjects raised by callers have been categorised into five groups: information, prevention, HIV-testing, living with AIDS, and other. Table 2 shows the themes that relate to each of these five categories. On average, each caller to the Helpline raised 2.6 subjects.

Figure 13 shows that 43% of calls to the Helpline between August and October 2003 raised subjects about 'information,' making this the most common call subject. The category 'information' includes basic information about HIV/AIDS, symptoms, modes of transmission, STIs, and TB. It also includes questions about HIV/AIDS-related issues raised in the media (Craythorne 2003b). Among other subject categories, proportions vary from 10% (HIV testing) to 18% (living with AIDS).

Between August and October 2003, informational subjects were more likely to be raised by younger callers (under age 19) than by adults.² Differences in the content of calls were noted in relation to callers' self-reported HIV status (Figure 14).

First, a higher proportion of self-reported HIV-negative callers (47%) ask for information on HIV/AIDS than do HIV-positive callers (34%). Similarly, HIV-negative callers are more likely to raise the subjects of prevention and HIV testing than are HIV-positive callers. The proportion of HIV-positive callers discussing subjects related to living with AIDS (30%) was almost two times higher than among HIV-negative callers (16%) and those who did not disclose their status (14%).

Examining trends in call subjects over the full period of the review (Figure 15), the proportion of callers seeking information about HIV/AIDS decreases with time, from a high of 52% in the fourth period to 43% in the final period.

A similar tendency is evident with calls about prevention, although the decrease began earlier – at least from the second period. By contrast, calls raising the subjects of living with AIDS and 'other' increased over time.

Sources of information about the Helpline

Figure 16 presents the sources of information from which callers became aware of the Helpline. Between August and October 2003, the 'other' category was by far the most frequently cited source of information (44%). It was suggested in interviews with counsellors that among the sources falling into this category were condom packaging (which include the number for the Helpline and a red ribbon logo) and newspapers. The next most reported sources of information were pamphlets (17%), television (11%) and radio (7%).

Pamphlets and health care workers were more frequently cited as sources of information by females than by males. Males, on the other hand, were more likely than females to report Telkom phone cards and posters as sources of information, in addition to the 'other' category noted above.

Patterns can be detected when examining the sources of information about the Helpline cited by callers during the six different periods under review. While pamphlets had the highest share in the first period (38%), 'other' led in all other periods (39% to 47% of all sources reported by the callers). The proportion of callers claiming to have heard about the Helpline from friends and family did not increase over time.

The Khomanani Campaign

The Khomanani Campaign (2001-2003), which, among other activities advertises the AIDS Helpline number, has run a number of campaigns on broadcast media. The period from mid-2002 onwards is reviewed here with a view to exploring call patterns in relation to advertising bursts.

Radio and television advertisements went on the air in October 2002. It is noted that not all advertisements actively promoted the Helpline or included the Helpline number (some, for example, promoted the Circles of Support helpline number). The Helpline number is, however, widely available through secondary sources such as condom packaging and leaflets, and it would be expected that advertising bursts would increase 'top of mind' awareness of HIV/AIDS, and as a consequence, stimulate the rate of Helpline calls.

When comparing the number of people reporting television to be their source of information on the Helpline between July 2002 and October 2003 and the number of television advertisements with the Helpline phone number broadcast during the same

Figure 12: Type of call by age group

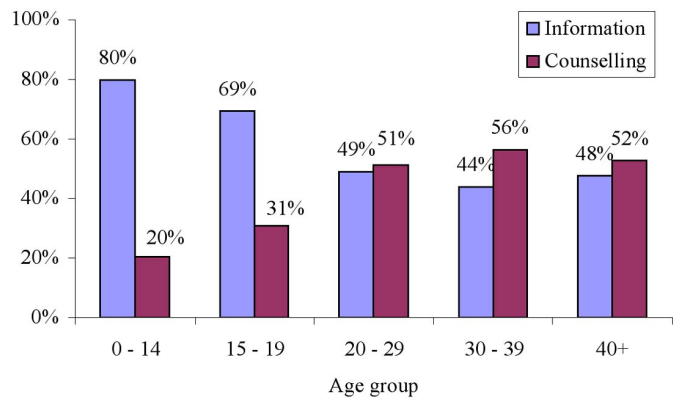


Figure 13: Distribution of subjects raised by callers, Aug-Dec 2003

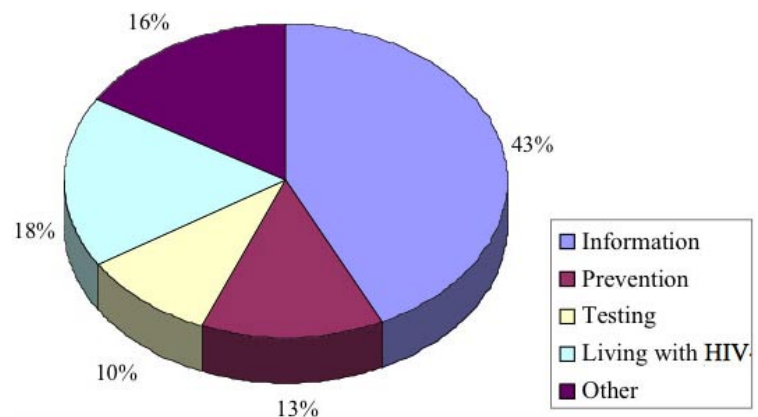


Figure 14: Distribution of HIV status by subject, Aug-Oct 2003

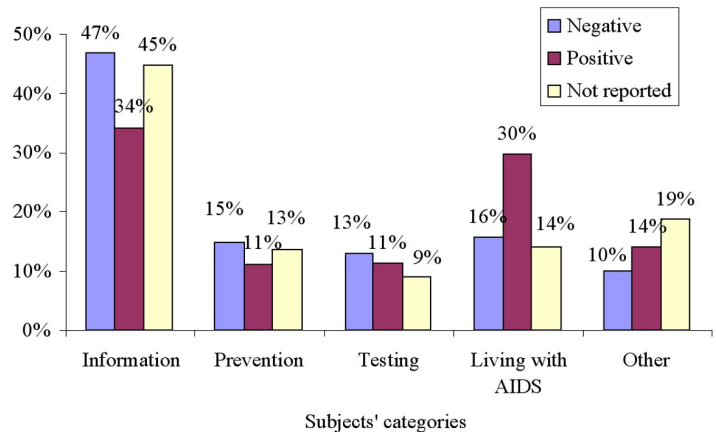


Figure 15: Distribution of subject by time period

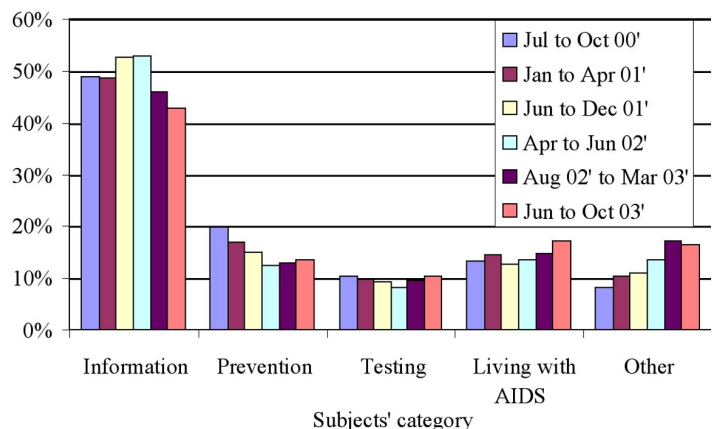


Figure 16: Sources of information on the helpline, Aug-Oct 2003

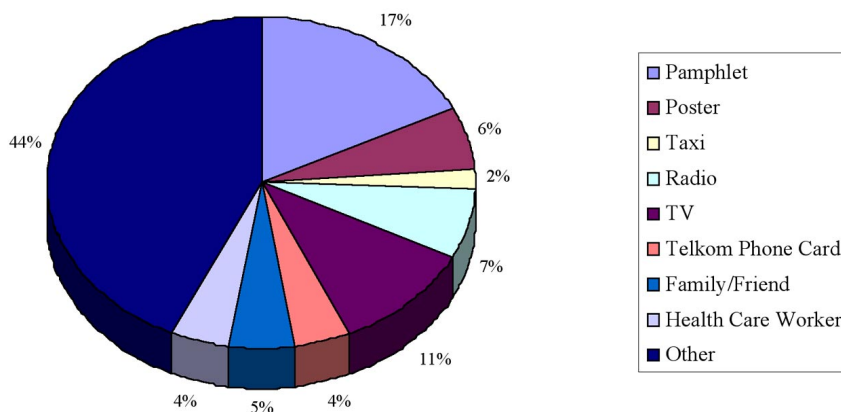


Figure 17: Distribution of callers reporting TV as source of information about Helpline and distribution of TV ads broadcast during same period

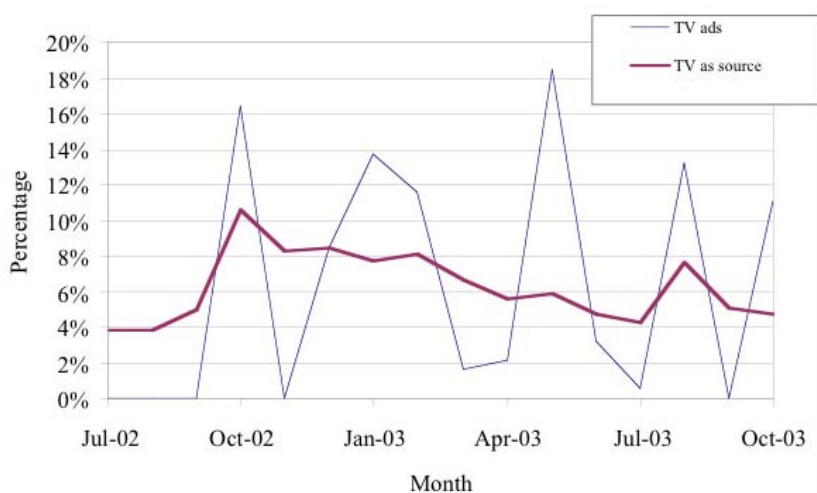
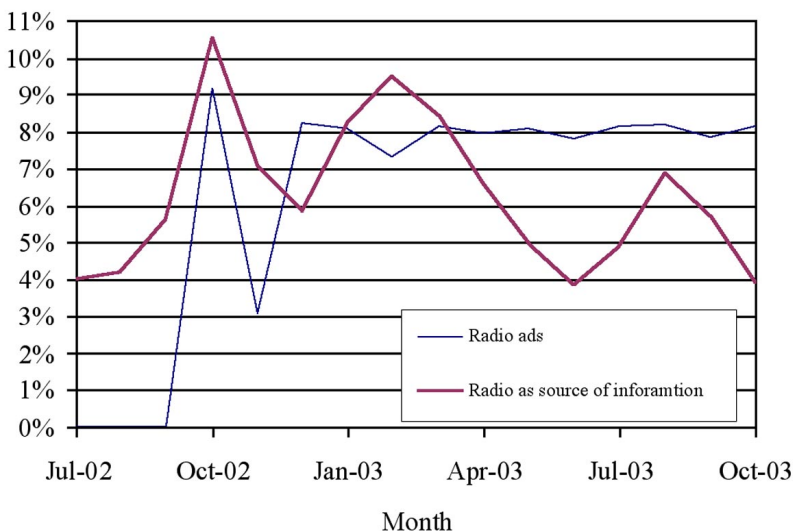


Figure 18: Distribution of callers reporting radio as source of information about Helpline and distribution of radio ads broadcast during same period



period, the data shows that callers reporting TV as a source of information increased from 3.8% in July 2002 to 10.5% in October 2002 (Figure 17) – the month when advertisements with the Helpline number first appeared during 2002. Thereafter the proportion of callers reporting TV as a source of information steadily decreased, reaching 4.7%

in October 2003, although the television advertisements continued to be broadcast. During months when no television advertisements were broadcast, the decrease in such calls was higher than during months when television advertisements were broadcast.

The proportion of radio as a source of information jumped from 5.6% in September 2002 to 10.5% in October 2002 when radio advertisements with the Helpline number began to be broadcast (Figure 18). This proportion gradually decreased to 3.9% in October 2003, although the number of advertisements broadcast did not decrease during this period.

Discussion

The Helpline data provides insights into the HIV/AIDS epidemic in South Africa. Although callers to the Helpline are not representative of the general population, emerging trends are useful to consider in relation to communication strategies and provision of support services.

Between July 2000 and October 2003 the number of calls to the Helpline fell substantially. There are various reasons why this may have been the case.

First, the overall decrease in calls may be linked to the fact that during the first period of analysis there was little direct promotion of the Helpline. Previous analysis by the Beyond Awareness Campaign had shown strong correlations between advertising bursts and call rates, and it is therefore possible that the lower level of promotion may have contributed to declines in call rates.

Second, as time passes and the HIV/AIDS epidemic advances, South Africans may be more aware of and informed about HIV/AIDS, which may lead to a shrinking need for basic information. Support for this explanation can be found in the

increasing proportion of counselling calls, as related to informational calls, beginning in the third quarter of 2002.

Third, the Helpline is not the only resource of its type in South Africa, and it is possible that calls to the Helpline are decreasing at the same time that calls to other sources are increasing. For example,

the widespread marketing of loveLife's call centre, thethajunction, may have shifted call trends amongst youth. It is important to note, however, that the Nelson Mandela/HSRC household survey found that awareness of the AIDS Helpline was higher than the loveLife helpline among all age groups – for example, 51.4% vs 28.1% amongst 12-14 year olds; 62.6% vs 37.4% amongst 15-24 year olds; and 62.1% vs 33.3% amongst 25-49 year olds (Shisana et al 2002).

The findings of the study raise important questions for the Helpline in terms of the way it is marketed and positioned in South Africa. In promotional campaigns, the Helpline is depicted first and foremost as a source of information on HIV/AIDS, rather than as a counselling service. However, a growing proportion of calls to the Helpline involve counselling, and beginning in March 2003, training sessions for Helpline counsellors have focused increased attention on counselling skills (Craythorne 2003a). The growing importance of counselling in the Helpline's work may, therefore, point to the need for adjustments in Helpline promotion, to make people more aware that the Helpline is a resource for both information and counselling support.

Another finding from the study is that, over time, an increasing proportion of callers to the Helpline have chosen to disclose their HIV status. This may suggest that, as the epidemic progresses, the stigma surrounding HIV/AIDS is beginning to recede and that people are increasingly comfortable being open about their status. Additionally, a growing number of callers may need to reveal their status in order to receive information particular to living with HIV/AIDS.

The study has provided insight into the various sources of information that have led callers to the Helpline. It appears that condom packaging and newspapers are the dominant source of information about the Helpline, particularly among men, followed by pamphlets, television and radio. Significantly, family and friends seem to be marginal sources of information about the Helpline. While it could be expected that this source of information might grow over time, as a result of people recommending the Helpline to others and the value of the Helpline spreading by word of mouth, this does not appear to have been the case.

From a planning point of view, an optimal level should be determined for the number of calls that the AIDS Helpline can handle at any given time. This is in turn interdependent with the need to decrease the rate of hoax calls, but also with the relative balance between short information-oriented calls and longer counselling calls. There appears to be little direct co-ordination between the promotion of the Helpline and internal analysis of call rates and related problems.

There are obvious cost-benefits to be achieved

through closer collaboration between the Department of Health and the Helpline management with regard to communication campaign activities. In general, HIV/AIDS campaigns increase call rates to the Helpline, and Helpline-specific communication can make important impacts on the efficiency of the line – for example, internal strategies in combination with promotional activities can be developed to reduce the rate of hoax calls, thus reducing unnecessary call charges. Similarly, promotion of particular services (eg. referral or counseling) would improve utility of the line, and it might also be relevant to promote particular themes in line with rollouts of VCT, antiretroviral (ARV) treatment and related interventions.

This current analysis, and parallel qualitative analysis conducted as part of the Communicating AIDS Needs project, provides insight into the merits of monitoring activities, research and analysis. Although basic indicators are gathered and documented within the Helpline on a monthly basis, there are important potentials for additional research processes which can be utilised to provide strategic direction, both internally, and within broader communication policies and strategies.

Acknowledgements

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Footnotes

1 Such changes are frequently related to the intensity of promotion of the Helpline; in this case, the drop may be linked to the discontinuation of the advertising campaign

between February and June 2000 (see Stratten 2000).

2 One factor contributing to calls by youth seems to be school pupils who phone the Helpline with requests for information needed to complete homework and projects on AIDS (Craythorne 2003c).