

Quality of counselling and support provided by the South African National AIDS Helpline: Content analysis of mystery client interviews

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Background. Telephone helplines can facilitate referral, education and support for patients living with HIV or those concerned about the infection. The anonymity of helplines facilitates discussion of sensitive issues that are difficult to raise face to face. These services could support the expansion of HIV self-testing. However, maintaining quality and standardising messages in rapidly evolving fields such as HIV is challenging.

Objectives. To evaluate the quality of the South African (SA) National AIDS Helpline.

Methods. Mystery clients posing as members of the public made 200 calls to the service in 2014. They presented several scenarios, including having received HIV-positive results from a doctor's secretary or through self-testing. Following the call, 'clients' completed a semistructured questionnaire on the information received and the caller-counsellor interaction.

Results. Calls were answered within a median of 5 seconds (interquartile range 2 - 14). Conversations took place in 8 of the 11 SA official languages, though mainly in English. Overall, 75% of callers felt that with the information they received they could locate a nearby clinic for further services. Counsellors expressed appropriate levels of concern about inadequate counselling that callers had received and confidentiality breaches in some scenarios. Eight counsellors incorrectly mentioned the need for a waiting period to confirm a positive result. Consistent with policy, almost all said that being foreign would not affect HIV treatment access. About 90% explained the need for CD4+ testing and antiretroviral therapy, but only 78% discussed HIV prevention. Counsellors were mostly empathetic (83%), though some adopted a neutral tone (10%) or were brusque (6%) or unhelpful (2%).

Conclusions. Overall, helpline counsellors were proficient at providing information about local clinics, HIV testing and steps needed for initiating ART. Dissatisfaction with the caller-counsellor interactions, instances of incorrect information and the relatively low attention accorded to HIV prevention are worrying, however. Training for both refreshing and updating knowledge, and supervision and monitoring of calls, could target these areas.

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Many studies indicate that telephone helplines are effective resources for education and support for a variety of medical and psychological conditions, ranging from depression and smoking cessation to cancer and rheumatoid arthritis.^[1-6] HIV helplines were initiated in the early years of the HIV epidemic in high-income countries and gradually spread to several low- and middle-income countries.^[7] Although there are few rigorous studies of these helplines,^[8,9] as early as 1989, given the high levels of response to such services, HIV researchers held that 'the value of hotlines is now beyond any doubt in those communities where they have been established.'^[8]

In general, HIV helplines mainly aim to provide preventive, destigmatising and support functions.^[9] The service may be especially useful for dispelling myths or misconceptions about HIV. They can also address specific concerns for individuals that have not yet been addressed in mass media campaigns, or cannot be effectively addressed by these campaigns.^[9] Confidential, anonymous contact with counsellors also allows callers to discuss issues such as sexuality,

sexual practices and deep-seated fears that may be difficult to raise in face-to-face counselling. They can be more convenient and less costly than travelling to a health facility or counselling centre.

HIV helplines have evolved over time, from initially serving principally as sources of information and referral to later taking up a predominantly counselling role.^[10,11] The number of calls and characteristics of callers also fluctuate over time, as needs for information and counselling shift with the epidemic^[11] and as new HIV services become available.^[10] The role of helplines has shifted again with HIV self-testing, where the bulk of post-test counselling for self-testers may take place on helplines.^[12]

A toll-free HIV helpline was established in 1991 by the South African (SA) National Department of Health in partnership with Lifeline Southern Africa, a non-governmental organisation (NGO) that offers psychological counselling and related services.^[13] The helpline aims to provide anonymous, confidential information and counselling about HIV, as well as referrals to public sector services

near the caller. Calls can be made 24 hours a day and in all SA's 11 official languages, as well as in Shona, the language commonly spoken in neighbouring Zimbabwe. Calls are mostly from adults, including students and health workers, but sometimes from children. The topics discussed mostly concern HIV testing and prevention, prevention of mother-to-child transmission, post-exposure prophylaxis, antiretroviral treatment (ART) and tuberculosis (TB). Staff work in a single call centre, and are salaried and full-time employees. Twenty counsellors are available for calls between 06h00 and 18h00, two nurses from 07h00 to 17h00 and two counsellors from 18h00 to 06h00. In total, 28 counsellors are employed by the centre. They include females and males, from nine different ethnic groups. In addition to being a source of information, counsellors are tasked with assisting people who have tested HIV-positive to remain calm if they display heightened emotions, establishing whether the caller is alone or has someone with them for support, understanding the caller's feelings at the time, and finally empowering the person and referring them for additional support, as required. Callers are commonly referred to organisations that provide violence and family support, legal advice and suicide helplines. Nurses at the centre deal with calls about ART and health-related issues, while social workers are responsible for debriefing helpline staff about difficult calls they have had. In addition to telephonic assistance, the service frequently does community outreach to raise awareness of its services, for example through presentations and exhibitions.

Staff at the centre receive training on customer service and counselling, HIV and other sexually transmitted infections, TB, and HIV testing and counselling. Intermittent training updates on advances in the field of HIV are provided by the Department of Health and other professional development bodies. The helpline services are widely promoted and have been included in many national- and provincial-level mass media campaigns over time, as well as in stand-alone promotional activities. Such publicity bursts have been shown to raise the number of calls made to the centre.^[10,14] The call centre number is printed on the packaging of the approximately one billion male condoms distributed free of charge in the public sector each year.^[15] National household surveys and other studies indicate that by 2002, 60% of South Africans aged >18 years were already aware of the helpline,^[16,17] and by 2005, about 5% had called the centre at least once.^[18] During the period 2001 - 2003, the centre received ~14 000 calls per month;^[10] this declined to ~4 500 per month in 2014 - 2015, and to ~3 500 per month in recent years (AIDS Helpline data).

Determining the quality of information and counselling given by helplines could identify gaps in the services and ways in which they could be improved. Moreover, it is important to ascertain the nature of interactions between callers and counsellors, especially attitudes of helpline staff towards stigmatised groups.^[19,20] In SA this particularly applies to foreigners, who are often stigmatised by healthcare workers, some of whom even incorrectly believe that foreigners are not eligible for health and other services in the country.^[21] While several studies evaluated the SA AIDS Helpline in

the first decade after its establishment,^[7,10,14] an updated assessment is needed, especially with regard to whether the centre has kept pace with changes in HIV testing and treatment. Findings are particularly relevant as HIV self-testing grows, with the helpline poised to play a key role in supporting self-testers. We therefore employed mystery clients posing as members of the public who presented several scenarios during calls to the centre, mostly pertaining to situations where a patient would require a confirmatory HIV or CD4+ cell count test. Analysis focused on the quality of information provided during the calls and the nature of caller-counsellor interactions.

Methods

Study procedures

From July to December 2014, 200 anonymous calls were made to the helpline by a team of five female researchers. The researchers, aged 30 - 56 years, made between 35 and 43 calls each. Three of the callers were community health workers, who had grade 11 or 12 education. The other two had a tertiary-level diploma and worked as project administrator and research assistant.

Calls took place at various times of the day between 08h00 and 21h00, and almost all were on weekdays. Callers who were multilingual were encouraged to use languages other than English during the calls, enabling the responsiveness of the centre to different groups in the country to be assessed. Calls took place in 8 of the 11 official SA languages, though mainly in English ($n=71$, 36%), isiZulu ($n=46$, 23%), isiXhosa ($n=31$, 16%) and Sesotho ($n=28$, 14%). Six scenarios were presented (Table 1). The scenarios were chosen because they represented plausible circumstances in which an HIV test might have been done without pre- or post-test counselling, and the caller would require post-test counselling, information about the care an HIV-infected person requires, and a referral. The scenario of 'calling on behalf of a friend' was included so that researchers with SA accents (four of the callers were South African) could claim to be calling on behalf of a foreigner and thus assess the counsellor's response to foreigners requiring care.

The conversation with the counsellor followed a prespecified series of steps, beginning with a brief introduction and a standardised description of the scenario selected for the call. Thereafter, the caller asked for the name of the clinic closest to them, as well as what they should do if a further confirmatory test was also positive. Towards the conclusion of each call, the person said that they (or the friend they were calling on behalf of, if applicable) were from Zimbabwe, Nigeria, or a range of other African countries. The caller then enquired whether this would influence their ability to access healthcare in SA. Calls were not recorded.

Data collection and study measures

Following the call, the person who made the call completed a semi-structured questionnaire, which included 14 items and was designed *de novo* by the research team (we could not locate an analogous or validated instrument). The characteristics of the calls were captured in terms of the following variables: time taken to answer the call; type

Table 1. Six scenarios presented by mystery clients*

'I have just been phoned by my doctor's secretary, who told me that my HIV test came back positive' ($n=49$)
'I have just received a call from my insurance company, who says that I have tested HIV-positive' ($n=48$)
'I have just bought a self-testing kit from a pharmacist, and seem to have tested HIV-positive' ($n=54$)
For the remaining three scenarios, the researcher gave one of the above scenarios, but said they were calling on behalf of a friend ($n=16$, $n=16$ and $n=15$, respectively)

*Information missing on 2 calls.

of scenario presented; whether the person called on someone else's behalf; language used; and whether the counsellor could speak that language and was clearly audible. Data were captured on whether the caller had been given information about the location of the nearest clinic, and whether being a foreigner affected access to the clinic compared with residents, categorised as 'no difference in access', 'different access' or 'uncertain'. Using dichotomous variables, the caller documented whether advice had been given on safe sex and the need for a confirmatory HIV test, CD4+ count and ART. The nature of the caller-counsellor interaction was classified as empathetic, concerned, neutral, brusque (rude or brief) or unhelpful. There were two open-ended questions, where free-text responses were recorded on what specific steps the counsellor had advised the caller to take next, as well as general comments on anything that struck the caller as noteworthy during the conversation.

Data management and analysis

Questionnaire responses were entered directly into a REDCap database and analysis was done using Intercooled Stata V12.0 (StataCorp, USA). A χ^2 test was used to detect associations between categorical variables, specifically whether the nature of the call and responses given differed when the mystery client posed as themselves or as phoning on behalf of a friend. Free-text responses were reviewed and manually coded according to emergent themes. Coded text was then sorted into a matrix that isolated main themes for further manual analysis. Illustrative quotes were extracted from the free-text responses, as applicable. Data on the gender of the counsellor were drawn from the free-text responses in the database where possible, as this had not been included in the questionnaire. Denominators vary slightly owing to missing data.

The responses of the counsellors were interpreted in the light of the national policies at the time of the study. Of note, the recommended CD4+ cell count for ART initiation was 350 cells/ μ L in 2014.^[22] Further, the Department of Health recommended that an HIV-positive diagnosis be confirmed by two rapid HIV tests, but that HIV self-testing should not be done.^[23] HIV self-testing has recently been endorsed by the World Health Organization and test kits are increasingly available in SA, for example through pharmacies.^[24,25] Policies stated that being a foreigner was not to influence one's access to ART and other HIV services.

Approval for study procedures was given by the Human Research Ethics Committee, University of the Witwatersrand (ref. no. H120701). Those answering the call were not alerted to the fact that they were part of a research study, and informed consent was not taken from the helpline counsellors. No identifying information was noted about the helpline worker. As recommended by methodological guidelines on use of mystery clients,^[26] we informed the helpline of the planned study. A meeting was held with the NGO running the helpline 2 years before the study to discuss the purpose of the study and explain the study protocol. Researchers requested the NGO not to inform the helpline counsellors about the planned study. The overall findings have been shared with the helpline management to enable them to give feedback to the helpline counsellors on their work, as well as to inform potential improvements in the service.

Results

Characteristics of the call

Almost all calls were answered (99%, 197/200). The median time to answering a call was 5 seconds (interquartile range 2 - 14), and 87% of calls were answered within 30 seconds (173/198). In 95% of cases (189/199) the counsellor could speak the language in which the caller

started the conversation. Callers using languages that the counsellor could not speak were transferred to another counsellor who could ($n=4$, 2%), or a mutually understood language was used ($n=4$, 2%). In only one instance did the counsellor continue the conversation in a language that the caller did not understand. Most researchers reported that they were able to hear the counsellor well ($n=173$, 87%) and 12% ($n=23$) said they were unable to make out some parts of the conversation, while only 2% ($n=4$) said they heard the counsellor poorly. Of the 128 calls where the gender of the counsellor was reported by the caller, the majority ($n=111$, 87%) had been answered by a female.

Referrals to local clinics

A large majority of callers were advised to go to the local clinic for further care. For the most part, the counsellor had specified that this was to get a confirmatory HIV test, 'just to be sure' or 'to confirm that I am really positive' ($n=190$, 95%). In eight instances the counsellors incorrectly advised callers that a 'waiting period' was needed before doing this second confirmatory test (either '6 weeks' or '3 months'). Two of the eight ascribed the need for waiting to the possibility that the caller was in the 'window period'. Another counsellor even specified that an ELISA test (which is a laboratory-based HIV test) and not a rapid test would be used to confirm the status, counter to national policy. A few counsellors were also noted as having suggested to callers that they would even need to do a third confirmatory test, with some advising that this be done again after 6 weeks or 3 months to further verify the results. Others even mentioned use of a CD4+ cell count test if uncertainty remained about the validity of the HIV test result, again contrary to policy.^[22]

Overall, 75% of callers (149/200) felt that with the information the counsellor had provided, they would have been able to locate the clinic recommended by the counsellor (Table 1). In three-quarters of the cases (150/200) the counsellor was able to give the caller the name of a clinic near them, and the actual street address and even directions were provided in some instances. In 41 cases (21%), however, the information given to the caller about locating a clinic was considered inadequate, for example entailing advice to 'ask around', either 'on the street' or from people staying with the caller. Six callers were advised to locate a clinic on the internet, for example to 'use the internet to Google the clinic near you' (3%).

Overwhelmingly, as per national guidelines, callers were referred to primary care clinics rather than secondary or tertiary hospitals, and only three were encouraged to attend private care. Advice about the affordability of public services was provided by some counsellors, for example, that 'I [the caller] need to rely on services that the government has put in place for us. Going private may not be cost-effective in the long run. I will be provided with a free CD4 count test, as well as counselling and free treatment.' Some were quite adamant in pushing the callers to make use of free services: 'she told me next time I must not test with the doctors because clinic is for free'. Almost all the counsellors (96%, 181/190) informed the callers that being a foreigner would not affect their ability to access care in SA. In only four cases (2%) did the counsellor incorrectly state that being a foreigner would make a difference, with one saying: 'The counsellor told me that ARVs are only for South Africans, my friend must go to get treatment in her country; they only need people who have South Africa ID.' In five instances (3%) the counsellor was uncertain whether foreigners have equal access to care.

Many counsellors expressed concern about the quantity and quality of counselling received by the caller (or the caller's friend), particularly in the scenario involving the self-test kits and the delivery

of test results by a doctor's secretary over the phone. This concern took several forms:

- Advising the caller to go to a clinic to access counselling services, or ask the doctor to arrange counselling.
- Urging counselling (and re-testing) if the caller's original test had been done with a self-test kit: 'The counsellor asked if I was counselled before buying the kit. My response was "No". She referred me to a local clinic or doctor to do the HIV test again, but this time it will be accompanied with counselling.'
- Directly asking about the caller's wellbeing and emotional state: 'How do I feel about the results I got via the phone? I said that I feel helpless and angry. Then suggested that I go to the clinic for testing and counselling'. Another asked 'if I have a glass of water and if there is someone next to me'.
- Providing actual 'post-test' counselling during the call: 'I was told that I was brave to do the test as a lot of people are afraid to know their HIV status. I was given post-test counselling which included positive living, safe sex and education on ARVs.'
- Encouraging the caller to phone the helpline again at any time for additional counselling.

Advice about services for HIV care and treatment

In total, in 73% of calls (146/198), the counsellor provided advice about all the following: a confirmatory HIV test, a CD4+ cell count, ART and HIV prevention (Table 2). About 90% of callers were told that they needed a CD4+ test done, and a similar proportion had discussed the need for ART. Overall, more than three-quarters (78%, 154/198) were given advice about the steps needed to prevent further HIV transmission. More importantly, the majority of callers (93%,

185/200) believed that they would be able to safeguard their health if they followed the information provided by the counsellor. In a few instances, counsellors mentioned the need for TB screening. Only one counsellor was recorded as having asked the caller if she was pregnant.

Variation across scenarios

Input from counsellors on the **use of self-testing kits** was mostly negative. Their biggest concerns were the absence of counselling, and whether the caller had 'read the instructions properly' or 'followed the proper procedure'. Two counsellors were said to have expressed 'surprise' and 'shock' at the caller's use of self-testing. A number of counsellors asked for additional information: Where had the test kit been purchased? How did the caller find out about self-testing? Why had the caller opted to self-test rather than to test at a clinic? One counsellor even asked 'if I was afraid to do the test at the clinic hence I bought the kit?'. Behind these questions, there appeared to be some doubt about whether the caller really had used a self-test kit. Two counsellors stated emphatically and incorrectly that 'at pharmacies they are no longer selling HIV and AIDS test kits because people are not using it correctly', and a third asked if the caller was a nurse, because working in a medical environment is the only way to explain access to self-test kits. But the questions also revealed a genuine interest among the counsellors about self-testing in some cases. One caller reported that 'the counsellor was not asking how I feel about the outcome of the test, but was fascinated by the self-test kit'. Most counsellors who addressed the issue of self-testing ended up advising the caller to go to a clinic for a second test, making it possible for pre- and post-test counselling to be provided, and for the test itself to be administered by a 'trained professional'. Discussion of ART was

Table 2. Quality of counselling and information in the South African National AIDS Helpline

Variable	Total, % (N=200)	HIV-positive callers, % (N=151)*	On behalf of friend, % (N=47)†
Language used			
English	35.5	36.4	31.9
isiXhosa	15.5	12.6	25.5
isiZulu	23.0	23.2	21.3
Sesotho	14.0	15.2	10.6
Other	12.0	13.0	10.6
Heard the counsellor well	87.0	85.4	89.4
Given location of public-sector clinic	74.5	72.9	80.9
Access to care for foreigners			
No different to others	95.3	95.1	97.8
Differs	2.1	2.8	0
Uncertain	2.6	2.1	2.2
Given sufficient information about next steps	92.5	93.4	91.5
Referred for HIV test, CD4+ count and ART, and given HIV prevention counselling	73.0	73.5	72.3
Referred for HIV testing	95.0	96.7	91.5
Advised to get a CD4+ count	91.5	92.7	87.2
Referred for HIV treatment	88.9	90.7	82.6
Counselled about preventing further HIV transmission	77.8	77.5	80.0
Counsellor's attitude			
Empathetic or concerned	83.0	83.4	83.0
Brusque	5.5	5.3	4.3
Unhelpful	2.0	2.0	2.1
Neutral	9.5	9.3	10.6

ART = antiretroviral therapy.

*The three scenarios where the caller phoned posing as themselves.

†Calls where the caller posed as a friend of someone else. All *p*-values for comparison of HIV-positive mystery clients and callers posing as a friend were >0.10 based on the χ^2 test.

less common in the self-testing scenario than in the scenarios where callers had been given results by an insurance company or doctor's secretary (85%, 46/54 v. 91/97, 94%; $p=0.06$).

As with the scenario above, the scenario in which **test results were given over the phone by an intermediary** (doctor's secretary or administrator at an insurance company) raised concerns for counsellors (although to a lesser degree than self-testing). Again, the main issue was that the caller had received their results in the absence of counselling, but there was also some disquiet around a breach of confidentiality: 'The doctor's secretary was not allowed to know about my status. The doctor should have called me about my results personally' and 'The insurance was not supposed to call you with the result.' Compared with other scenarios, mention of ART was highest in calls presenting the scenarios of the test result being given by an insurance company (94%, 45/48) or a doctor's secretary (94%, 46/49). Moreover, those posing as themselves, either having tested positive through self-testing or via an intermediary, were 2.1 times more likely to have counsellors discuss treatment options with them than those phoning on behalf of a friend (90.7% v. 82.6%, 95% confidence interval 0.80 - 5.3; $p=0.12$).

Counsellors also expressed some discomfort with the prospect of **giving advice to a proxy**. In most cases, the counsellor asked that the 'friend' phone in herself/himself, or that the caller pass on the number of the helpline to their 'friend'. Callers who asked why it was necessary to get the 'friend' to call were told that 'there will be questions I [the person calling] will not be able to answer' and 'it is essential for the friend to call in for herself so that she could also receive counselling'.

Where information was provided to the caller (to pass on to the 'friend'), this was limited to the simple message that they should go to their local clinic for a confirmatory test and to access 'full information' about HIV. Some asked for details about the 'friend's' CD4+ count and how they were coping with the news of the test results. A few counsellors extended encouragement to the caller for 'supporting my friend', and urged that 'I must be there for my friend and I must help her to go for confirmatory test.'

Nature of caller-counsellor interaction and quality of counselling

The counsellors' attitudes towards the caller, captured as a categorical variable, were considered to be empathetic or concerned in 83% of instances (166/200). In ~10% of cases (19/200) the counsellor was described as having adopted a neutral tone, while 6% (11/200) felt that the counsellor had been brusque (rude or brief); only 2% (4/200) were considered unhelpful. Analysis of free-text responses of the perspectives of callers provided more detailed understanding of these positive and negative sentiments.

Most **positive** comments rated the counsellor as 'patient', 'well-informed', 'relevant', 'supportive' and 'empathetic'. Along the same lines, other callers said:

'The counsellor afforded me the space to vent without being impatient with me.'

'The counsellor managed to calm me down as I was very emotional. I felt reassured.'

'Counsellor was very informative and relevant. I even felt like I really tested positive and got counselling.'

'... the answers were clear and the counsellor ensured that I understood what I need to do for myself.'

Negative comments, the minority of cases, included the counsellor being 'rude' or unhelpful:

'The counsellor was not really keen to speak to me.'

'The counsellor was not in the helping mood.'

'She sounded bored after I told her that I could not speak Zulu or a local language.'

Some said that the counsellor had provided the bare minimum of information. One said, for example, 'He said next time I need to go to the clinic, not phoning them [the helpline]'. A related form of response was to say 'the clinic will explain everything', or 'the clinic will take you through the process', thereby effectively shutting down any further questions. Also, sometimes the counsellor was determined to provide information or to simply give advice, rather than to listen or counsel:

'The counsellor was giving a lot of advice instead of listening to my story and insisting that I disclose to my husband.'

'Sometimes the counsellor gives too much information.'

Finally, there were a few instances where **misinformation** was supplied:

'The counsellor said you can test [HIV] positive when you have flu.'

'The counsellor was confusing CD4 count and viral load.'

Discussion

This study using mystery clients showed that counsellors at the SA National AIDS Helpline are generally proficient at providing information about how to access HIV services at a clinic, including assisting foreigners to do so. Only a few isolated cases were noted of 'foreigners' being stigmatised or of receiving incorrect information about access. Also, the need for confirmatory HIV testing and the steps required for initiating ART were generally well covered by counsellors. The few instances of incorrect information being provided and the relatively low attention given to HIV prevention are worrying, but could easily be remedied. Although the counsellors' attitudes towards callers were largely empathetic, a considerable proportion of callers still felt dissatisfied with the caller-counsellor interactions.

Importantly, the fact that almost all calls were answered timeously in this study suggests that the previous problem of unanswered calls, which had affected as many as a third to three-quarters of calls, has been addressed.^[7,10] It can be challenging to ensure sufficient staff and line capacity to answer calls, to have sufficient staff available in all languages and to deal with high numbers of hoax calls (which can make up as many as three-quarters of calls).^[7,10] Counsellors also need to make a rapid assessment of the client's current problem and emotional state of mind. They have to meet a wide range of needs and expectations of callers.

It is encouraging that a high proportion of callers were referred to services they require. While it is not known whether callers to the HIV Helpline then actually attend these services, a study of a sexual health helpline in Australia found that most of the patients referred had then accessed the services.^[27,28] Also encouragingly, in the context of xenophobia in SA, the low level of stigma towards foreigners is commendable, though the few failures in this regard show the need for ongoing vigilance on this issue. In contrast, a 2015 study assessing post-abortion support in toll-free call centres in Canada, also using mystery clients, documented considerable levels of shaming and stigmatising language, as well as medically inaccurate information.^[21]

Most of the information provided by the counsellors was accurate and standardised across calls, something not easy in the rapidly evolving field of HIV. Training and measures such as the supervision and monitoring of calls and review of call data can maintain the

quality of helpline services.^[7] Supervisors listening in on calls – analogous to ‘mystery client’ methodology – or monitoring call transcripts can evaluate the consistency of counsellor responses and their ability to respond to emerging issues in HIV, detect discrimination in counsellors’ attitudes, and inform discussions during counsellor debriefing sessions.^[7] Information garnered from analysis of call contents can also be used to help select the topics needed to be covered in HIV communication campaigns in SA.^[9,11,29]

As was noted in this study, achieving a balance between providing information on the one hand and psychosocial counselling on the other in a once-off, short exchange can be difficult: a focus on providing information sometimes came across as being neutral or not empathetic. Also, the provision of comprehensive information needs to be weighed against ensuring that the caller knows what steps are required next. Lastly, perhaps it is important to deal with people equally, even if they claim to be calling ‘on behalf of someone’. People may actually be calling for themselves in these cases – curtailing such conversations would then represent a lost opportunity.

The study has particular relevance to the present context in SA, where HIV self-testing is expanding rapidly.^[24] The role of the AIDS Helpline in providing post-test counselling is likely to grow as that of face-to-face counselling diminishes. It will be important to assess whether the helpline counsellors adapt to this new and evolving component of their work. Retailers of kits for self-testing actively promote the helpline as one means of addressing concerns about potential harms among people who self-test without access to information and support.^[30] Call centres are especially relevant for when self-testers disclose their status to their partners.^[31] A shift to telephonic counselling took place gradually in other countries, however.^[32] Indeed, many South Africans are familiar with face-to-face counselling after an HIV test, and some evidence suggests a strong preference for this modality, with conversations on the helpline viewed as being insufficient.^[12,33] Adding email or online chat to the current services of the helpline may hold several advantages. A Dutch service showed high levels of satisfaction with online mechanisms, which complemented telephonic ones.^[28] Electronic media would also avoid the costs of using a cellphone to call the centre (only calls from a landline are currently free), and there must surely be some benefits of electronic technology that could be drawn on to further strengthen the helpline.

The study methods warrant consideration. It is difficult to standardise interpretation of the calls across five researchers. Analysis of call transcripts may be the preferable option in such studies. Mystery client methodology, previously used in SA,^[34] is employed as a strategy to evade biases that occur during direct observations of service delivery.^[26,35] While mystery clients can mimic some aspects of ‘real’ callers, however, there are clearly limitations in doing so. The demographics, tone of voice and emotions expressed by mystery clients are likely to differ from those of a ‘real’ caller trying to come to terms with a recent diagnosis of HIV, for example. A mystery client who lands up speaking to the same counsellor more than once might be recognised by their voice. This limits the ability to make direct comparisons between mystery and actual calls. Also, having informed the helpline management that the study would take place may have influenced the findings. While researchers requested the management not to inform helpline staff about the study, this may have occurred and affected the results. The methods also raise ethical concerns. There needs to be a clear justification for employing mystery clients or any form of deception in research.^[21,36] In this instance, we contend that it was necessary for optimising the validity of the study, but also because it would ultimately fulfil utilitarian goals by improving the quality of a public resource. Moreover, those

who were deceived were not identifiable and the deception is very unlikely to have negative consequences for individuals. Another concern is that the study may have prevented helpline counsellors from responding to ‘real’ calls from the public. This is unlikely to be the case given that only 200 calls were made over 6 months, an insignificant proportion of all calls handled in that period. Overall, we contend that the potential benefits of the assessment justify the potential negative consequences^[37] and that this methodology may be useful for future studies assessing the quality of health services in SA, especially those that involve stigmatised populations.^[34]

Conclusions

Helpline staff mostly provided appropriate information and counselling. Additional training on the gaps in information noted in this study is required, especially around confirmation of HIV test results and issues such as the window period. These could form part of continuing education sessions, done quarterly for example, that aim to refresh and update the knowledge and skills of counsellors. Also, it seems that HIV prevention is receiving insufficient attention. Importantly, there appears to be a need for the standardisation of key messages, where agreed-upon information is provided to clients in common situations. Many of these concerns may become more important with the rapid expansion of HIV self-testing. Online information and counselling provision through email and online chat could be useful complements to existing services.

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1. Stead LF, Hartmann-Boyce J, Perera R, Lancaster T. Telephone counselling for smoking cessation. *Cochrane Database Syst Rev* 2013, Issue 8. Art. No.: CD002850. <https://doi.org/10.1002/14651858.CD002850.pub3>
2. Clinton-McHarg T, Paul C, Boyes A, et al. Do cancer helplines deliver benefits to people affected by cancer? A systematic review. *Patient Educ Couns* 2014;97(3):302-309. <https://doi.org/10.1016/j.pec.2014.09.004>
3. Danielsson AK, Eriksson AK, Allebeck P. Technology-based support via telephone or web: A systematic review of the effects on smoking, alcohol use and gambling. *Addict Behav* 2014;39(12):1846-1868. <https://doi.org/10.1016/j.addbeh.2014.06.007>
4. Gatz P. The effectiveness of helplines for the treatment of alcohol and illicit substance use. *J Telemed Telecare* 2015;21(1):18-28. <https://doi.org/10.1177/1357633x14555643>
5. West R, Raw M, McNeill A, et al. Health-care interventions to promote and assist tobacco cessation: A review of efficacy, effectiveness and affordability for use in national guideline development. *Addiction* 2015;110(9):1388-1403. <https://doi.org/10.1111/add.12998>
6. Gates P, Albertella L. The effectiveness of telephone counselling in the treatment of illicit drug and alcohol use concerns. *J Telemed Telecare* 2016;22(2):67-85. <https://doi.org/10.1177/1357633x15587406>
7. UNAIDS. HIV/AIDS counselling, just a phone call away. Four case studies of telephone Helpline/Helpline projects. 2002. http://www.unaids.org/en/resources/documents/2002/20021111_jc817-phonerecall_en.pdf (accessed 25 May 2018).
8. Miller D. Opening Ceremony. First European AIDS Hotline Conference, Amsterdam, the Netherlands. April 1989. Text included in http://www.unaids.org/en/resources/documents/2002/20021111_jc817-phonerecall_en.pdf (accessed 25 May 2018).
9. Kalichman SC, Belcher L. AIDS information needs: Conceptual and content analyses of questions asked of AIDS information hotlines. *Health Educ Res* 1997;12(3):279-288. <https://doi.org/10.1093/her/12.3.279-a>
10. Katz I. The South African National AIDS Helpline: Call trends from 2000 - 2003. Centre For AIDS Development, Research and Evaluation (CADRE), 2004.
11. 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. <https://doi.org/10.1590/s1020-49892010000200002>
12. Spyrellis A, Abdulla S, Frade S, et al. Are women more likely to self-test? A short report from an acceptability study of the HIV self-testing kit in South Africa. *AIDS Care* 2017;29(3):339-343. <https://doi.org/10.1080/09540121.2016.1234687>
13. LifeLine. <http://www.lifelinejhb.org.za/index.aspx> (accessed 16 September 2016).

14. Stratten K, Ainslie R. Field Guide: Setting Up a Hotline. Baltimore: Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, 2003.
15. Western Cape Government. Choice condoms go to the Max. 2016. <https://www.westerncape.gov.za/general-publication/choice-condoms-go-max> (accessed 26 May 2018).
16. Parker W, Oyosi S, Kelly K, Fox S. On the move: The response of public transport commuters to HIV/AIDS in South Africa. Pretoria: National Department of Health, 2002.
17. Shisana O, Simbayi L, Nelson Mandela/HSRC Study of HIV/AIDS: South African National HIV Prevalence, Behavioural Risks and Mass Media Household Survey 2002. 2002. https://www.infocenter.mercha.org.sz/sites/default/files/MandelaHSRCStudy_1.pdf (accessed 26 May 2018).
18. Shisana O, Rehle T, Simbayi L, et al. South African National HIV Prevalence, HIV Incidence, Behaviour and Communication Survey. 2005. <http://www.wsu.ac.za/hsrc/html/2152-9.pdf> (accessed 26 May 2018).
19. Agarwal A, Hamdallah M, Swain SN, et al. Implementation of a confidential helpline for men having sex with men in India. *JMIR Mhealth Uhealth* 2015;3(1):e17. <https://doi.org/10.2196/mhealth.3978>
20. Walls HL, Vearey J, Modisenyane M, et al. Understanding healthcare and population mobility in southern Africa: The case of South Africa. *S Afr Med J* 2015;106(1):14-15. <https://doi.org/10.7196/SAMJ.2016.v106i1.10210>
21. LaRoche KJ, Foster AM. Toll free but not judgment free: Evaluating postabortion support services in Ontario. *Contraception* 2015;92(5):469-474. <https://doi.org/10.1016/j.contraception.2015.08.003>
22. National Department of Health, South Africa. HIV guidelines repository. 2016. <http://www.sahivsoc.org/SubHeader?slug=ndoh-and-who-guidelines> (accessed 26 May 2018).
23. Richter ML, Venter WDF, Gray A. Enabling HIV self-testing in South Africa. *S Afr J HIV Med* 2012;13(4):186-187. <https://doi.org/10.7196/sajhivmed.858>
24. World Health Organization. WHO recommends HIV self testing: Policy brief. 2016. <http://apps.who.int/iris/bitstream/10665/251549/1/WHO-HIV-2016.21-eng.pdf> (accessed 26 May 2018).
25. Health-e News. Home HIV testing gets the green light. 2016. <https://www.health-e.org.za/2016/02/08/home-hiv-testing-gets-the-green-light/> (accessed 28 May 2018).
26. Boyce C, Neale P. Pathfinder International Tool Series. Monitoring and evaluation: Using mystery clients: A guide to using mystery clients for evaluation input. 2006. http://www2.pathfinder.org/site/DocServer/m_e_tool_series_mystery_clients.pdf (accessed 26 May 2018).
27. Ewing M, Read P, Knight V, et al. Do callers to the NSW Sexual Health Infoline attend the services they are referred to? *Sex Health* 2013;10(6):530-532. <https://doi.org/10.1071/sh13106>
28. Mevissen FE, Eiling E, Bos AE, et al. Evaluation of the Dutch AIDS STI information helpline: Differential outcomes of telephone versus online counseling. *Patient Educ Couns* 2012;88(2):218-223. <https://doi.org/10.1016/j.pec.2012.04.007>
29. 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):201-206. [https://doi.org/10.1016/S0738-3991\(03\)00214-3](https://doi.org/10.1016/S0738-3991(03)00214-3)
30. Clicks. Everything you need to know about HIV home test kits. 2017. <https://clicks.co.za/health/article-view/everything-you-need-to-know-about-hiv-self-testing> (accessed 26 May 2018).
31. World Health Organization. Guidelines on HIV self-testing and partner notification: Supplement to consolidated guidelines on HIV testing services. 2016. <http://www.who.int/hiv/pub/vct/hiv-self-testing-guidelines/en/> (accessed 26 May 2018).
32. Krause J, Subklew-Schume F, Kenyon C, Colebunders R. Acceptability of HIV self-testing: A systematic literature review. *BMC Public Health* 2013;13:735. <https://doi.org/10.1186/1471-2458-13-735>
33. Choko AT, Desmond N, Webb EL, et al. The uptake and accuracy of oral kits for HIV self-testing in high HIV prevalence setting: A cross-sectional feasibility study in Blantyre, Malawi. *PLoS Med* 2011;8(10):e1001102. <https://doi.org/10.1371/journal.pmed.1001102>
34. Scorgie F, Vearey J, Oliff M, et al. 'Leaving no one behind': Reflections on the design of community-based HIV prevention for migrants in Johannesburg's inner-city hostels and informal settlements. *BMC Public Health* 2017;17(1):482. <https://doi.org/10.1186/s12889-017-4351-3>
35. Huntington D, Lettenmaier C, Obeng-Quaidoo I. User's perspective of counseling training in Ghana: The 'mystery client' trial. *Stud Fam Plann* 1990;21(3):171-177. <https://doi.org/10.2307/1966716>
36. Slone L, Hulle J. Deception of Research Subjects. Burlington, Mass: Jones & Bartlett Publishers, 2002.
37. Yagnik P, Gold J, Stooze M, et al. Development and pilot of a framework to evaluate reproductive health call centre services: Experience of Marie Stopes international. *BMC Health Serv Res* 2015;15:398. <https://doi.org/10.1186/s12913-015-1064-0>

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