Health communication in South Africa – evaluating audiocassettes as a medium to communicate HIV/AIDS information

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1. Background

It is universally accepted that people need information to be able to take informed decisions. In South Africa, where infection with HIV/AIDS has reached pandemic proportions,\(^1,2,3,4,5\) people need relevant and reliable information about how to cope with and/or avoid the disease.

The effective transfer of information causing people to take action is a complicated process and will not be discussed here. This paper will focus on the accessibility of information. People must, first of all, be able to access relevant, timely and appropriate information before information can reach the desired objective of behaviour change.

A substantial portion of the South African public can be seen as semi-literate with a low reading proficiency,\(^6,7,8\) of which the bulk is the poor and disadvantaged populations in rural areas. Yet the dissemination of information to these pre-literate audiences is characterised by a “pro-literacy bias”\(^9,10,11\).

The printed word, as in the rest of Africa, is often used in South Africa to disseminate information. In the National Department of Health’s Beyond Awareness Campaign, on HIV/AIDS, 87% of the small media budget was, for instance, spent on printed leaflets.\(^8\)

Effective communication of a message is largely dependent on the medium. This is emphasised by Omosa\(^12\) who indicates that “to communicate, there should be a proper matching of audience, message and medium”. The use of the printed
medium for an audience with questionable reading skills renders the information inaccessible and consequently useless with little or no value.

Sturges and Neill \(^\text{13}\) come to the conclusion that in Africa “the delivery method employed by any informative information service … must be essentially oral”. Leach \(^\text{7}\) found that “(d)espite the apparent influence of the printed word, the oral mode still predominates … among the rural population” and Maepa \(^\text{14}\) indicates that rural villagers prefer non-print materials because they are more accustomed to acquiring information through listening, rather than reading and that their information and communication channels are still deeply rooted in orality.

In the predominant oral character of African cultures, information is processed through an interactive social process. In these cultures the channels of communication are predominantly auditory and tactile rather than visual and literate. It is evident that mass media selected for the communication of information in Africa should take cognisance of these factors. \(^\text{15}\)

Since audiocassettes do not require sophisticated technology or literacy skills, Leach \(^\text{7}\) proposes that they should be investigated as a medium for the communication of information in the rural South African context. Similarly the Food and Agriculture Organization of the United Nations (FAO), \(^\text{16}\) points to audiocassettes as a very good low cost medium of which the potential has not been sufficiently recognised.

2. Aim of the research

The aim of this exploratory study was to investigate whether printed brochures or audiocassettes are more effective in communicating information about HIV/AIDS to regular patients at health clinics in South Africa.

Two brochures developed by the National Department of Health were selected. They are *Living with HIV/AIDS and HIV and AIDS Counselling*. These brochures form part of the *Khomanani Caring Together* campaign, the follow-up of the *Beyond Awareness Campaign* that is referred to in the study by Carstens & Snyman \(^\text{8}\) who evaluated the effectiveness of using print media in the dissemination of HIV/AIDS information.

The exact content and format of the brochures were recorded onto audiocassettes. Mother tongue speakers were employed to record the message in all the languages that were used in the brochures, e.g. English, Afrikaans, Zulu and Sotho. There was no attempt made to imitate the full colour illustrations in the brochures by adding value in the form of sound effects or dramatisation.

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By comparing the reception of the same messages delivered by two distinct media to different members of the intended target audience, we wanted to establish which medium was more accessible to the target audience.

3. Research process

To test the reception of the brochures and the audiocassettes two open-ended structured interview schedules were compiled. Both interview schedules were divided into three parts to obtain information about the:

- socio-demographic circumstances of the respondents
- respondents’ comprehension of the texts
- respondents’ feelings about and attitude towards the text.

Seventy-six respondents (40 for the audiocassette study and 36 for the brochure study) were randomly selected by means of purposive sampling at four health clinics in Gauteng. The individually either first listened to the recording on the audiocassette or were given time to read the brochure in the language of their choice. Thereafter they were interviewed by students of the University of Pretoria also in the language of their choice.

The data was analysed by means of qualitative manifest and latent content analysis, according to inductive open coding procedures. Similar and comparable questions were selected from both of the interview schedules, and their results were compared. These questions were divided into three categories, testing the specific aspects that needed to be explored, namely comprehension, acceptability and accessibility.

It is important to take into account that the respondents conceptualised the information they had heard or read, for themselves and sometimes expressed answers in their own words different from those used in the audiocassette. This was considered when analysing the data.

Only answers that were exactly the same or as close as possible to what was stated in the audiocassette or brochure were accepted. It was clear that some responses were based on the respondents’ own knowledge and/or personal experience and did not indicate comprehension.

4. Findings

The findings of the data analysis will be presented according to the categories of comprehension, acceptability and accessibility.

4.1 Evaluation of comprehension

Comprehension refers to what the respondents understood from the texts.
The following questions were used to compare the comprehension of the respondents who listened to the audiocassettes and those who read the brochures:

“Living with HIV and AIDS”
1 - Name the 5 things a person who has AIDS can do to live a positive, normal life with HIV and AIDS.
2 - What must a person with HIV do to develop a positive attitude in life?
3 - Who can support people with HIV?

“HIV and AIDS Counselling”
4 - What is a counsellor?
5 - Why must a person who is HIV+ talk to a counsellor?
6 - How should a counsellor behave?
7 - When must a person go for counselling?
8 - Where can a person go for counselling?

4.1.1 Example of the data analysis process:

With regard to all the questions, the answer of each individual respondent was compared to the “correct” answer as found in the brochure or audiocassette and evaluated accordingly. It was then coded to determine the collective understanding of the research sample. Below is an example of this procedure applied to question 1.

Name the 5 things a person who has AIDS can do to live a positive, normal life with HIV and AIDS.

This question tested the recall of the 5 main points mentioned in the text, namely:
- Practice safer sex
- Take care of your health
- Eat healthily to help your body fight diseases
- Have a positive attitude
- Get support

It was taken as correct if the respondents could refer to at least one of the aspects discussed within each of the above listed five main points.

4.1.1.1 Comparison between responses for question 1:

<table>
<thead>
<tr>
<th>Answer from text with examples</th>
<th>Responses: Audiocassette</th>
<th>Responses: Brochures</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Practice safer sex</th>
<th>Three quarters of the respondents referred to practicing safe sex.</th>
<th>Only two respondents referred to practicing safe sex.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: use condoms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Take care of your health</th>
<th>More than half of the respondents referred to the fact that it is important to take care of your health.</th>
<th>Less than half of the respondents referred to aspects regarding health care.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: get exercise, get treatment when sick, stop smoking and drink only a little alcohol</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eat healthily to help your body fight diseases</th>
<th>With the exception of three, all respondents made reference to the importance of healthy eating.</th>
<th>More than half of the respondents made reference to the importance of healthy eating.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: eat fresh fruit and vegetables, avoid junk food, drink lots of water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Have a positive attitude</th>
<th>A third of the respondents referred to the importance of a positive attitude.</th>
<th>Only three respondents referred to having a positive attitude.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: set goals in life, look at the positive side of things</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Get support</th>
<th>Almost half of the respondents referred to the importance of having support.</th>
<th>A quarter of the respondents referred to the importance of having support.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: family, friends, support groups, counsellors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1.1.2 Comparison between audiocassettes and brochures for question 1

The overall recall of the respondents who had listened to the audiocassette was higher than that of the group who had read the brochure. This could be deduced from the following:

[A] Comparison between their recall:

Not only could the group who listened to the audiocassette recall more of the specific text than those who read the brochures, their answers were also more direct and specific. The responses are summarised and compared in the following table:

<table>
<thead>
<tr>
<th>Audiocassette</th>
<th>Brochure</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the respondents said that they didn’t know</td>
<td>One respondent said that he/she didn’t know.</td>
</tr>
<tr>
<td>All of the respondents could list at least one of the points stated in the text.</td>
<td>Three quarters of the respondents could list at least one of the points</td>
</tr>
</tbody>
</table>

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Except for three respondents, all of them could recall a minimum of two of the stated points in the text.

Just more than a third of the respondents could recall a minimum of two of the stated points in the text.

Three quarters of the respondents referred to at least three of the points stated in the text.

Only six of the respondents referred to at least three of the points stated in the brochure.

A third of the respondents could list four of the stated points.

One of the respondents could list four of the stated points.

Six respondents could refer to all five the guidelines discussed in the text.

None of the respondents could refer to all five of the guidelines discussed in the text.

[B] Prevalence of responses that were never mentioned in the text:

The prevalence of responses that were never mentioned in the text was also significantly higher in the group who read the brochure than that of the group who listened to the audiocassette. The fact that these responses were never stated or implied in the text, indicates that they answered from their own knowledge bases and opinions. This might be an indication that they either did not read the brochures, or did not understand what they have read.

The prevalence of responses that were never stated or referred to in the text is summarised in the following table:

<table>
<thead>
<tr>
<th>Audiocassette</th>
<th>Brochure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four of the responses were never mentioned in the text. They are:</td>
<td></td>
</tr>
<tr>
<td>• “Ignore the fact that you are HIV+”</td>
<td></td>
</tr>
<tr>
<td>• “Abstain (from sex) to prevent infection”</td>
<td></td>
</tr>
<tr>
<td>• “Personal hygiene is important”</td>
<td></td>
</tr>
<tr>
<td>• “Eat three meals per day and full meals”</td>
<td></td>
</tr>
<tr>
<td>Approximately a third of the respondents made statements to things that were never mentioned or referred to in the brochure. Examples are:</td>
<td></td>
</tr>
<tr>
<td>• Status related: Accepting, disclosing or ignoring your status</td>
<td></td>
</tr>
<tr>
<td>• “Abstain from sex”</td>
<td></td>
</tr>
<tr>
<td>• “Behave like a normal person, have friends and go to parties”</td>
<td></td>
</tr>
<tr>
<td>• “Accept that you are like normal people and continue to have dreams because you are not different or will not be judged because of your status”</td>
<td></td>
</tr>
</tbody>
</table>

4.1.2 Conclusion regarding comprehension:
In all eight questions, the recall of the group who had listened to the audiocassette was overall higher than that of the group who had read the brochure. Their recall was also more specific than the answers from the group who read the brochure, whose recall was very vague and general. The prevalence of responses never mentioned or referred to in the text, was higher for the group who read the brochures than for those who listened to the audiocassettes. This probably indicates that they didn’t effectively understand what they had read.

4.2 Evaluation of acceptability

Acceptability refers to the attitude of the respondents toward the specific medium, e.g. whether they find it credible, relevant, realistic and reasonable.

4.2.1 Audiocassettes

Findings are discussed according to the questions in the interview schedule.

Question 1 aimed to determine the attitude of the respondents regarding listening to information. Their overall reaction was positive, with only one respondent mentioning that information is easily forgotten after listening to the audiocassette. This may be ascribed to the fact that the audiocassettes used for the research purpose were not ideally treated and tailored as health information vehicles.

In question 2 the respondents were asked how the audiocassette can be improved. More than half of the respondents felt that the audiocassette was fine as it is and that it was not necessary to change anything. Some gave good suggestions that could be considered when developing audiocassettes for health communication purposes. Their responses included the following:

- A dialogue format, role-play or a variety of voices must be used.
- HIV positive people should be used to make the recordings.
- More information on HIV/AIDS should be provided.

Question 3 tried to determine the respondents’ preference vis a vis brochures and/or audiocassettes. The responses to question three was very interesting. A quarter of the respondents said that they preferred to listen to information. Their reasons included:

- Illiteracy - “there are people who can’t read” and “when listening, you can understand anything”.
- It is more personal to listen to the information
- “There is no time to sit and read, when you have children they can listen too”.
- The ability to refer back to the audiocassette
A quarter said that they preferred to read the information. Reasons included that they understood better if they read, not being a good listener as well as getting bored when listening. This could be due to the nature of this experiential audiocassette, but it also ties with people’s learning styles\textsuperscript{18} and their preference to certain modes of information transfer. Other reasons were “if information is available in a brochure, you can share it with others” and “I can refer back to it and ask somebody if I don’t understand a word”.

Half of the respondents said that they prefer to use both media. The reasons they gave included that reading and listening makes the content clearer and more understandable for example “to listen reinforces what you read”. This can be indicative of low levels of literacy as one respondent stated: “listening helps those who don’t know how to read”.

With regard to question 4, three quarters of the respondents said that readily available audiocassette with health information will be more useful to them than brochures. Some of the reasons stated by them are as follows: “not everyone can read”, “understand better when listening”; “prefer listening to a person speaking” and “listening helps the concepts stick in your mind”. Seven respondents were indifferent and stated that “they are the same, you can replay (the audiocassette) and read again in the brochure”. Three respondents said that readily available audiocassettes would not be more useful to them than brochures. One stated that it is “just the same as what is read in the brochure”. Perhaps this person will feel differently if a proper audiocassette is developed that will have the same amount of added value than the brochure.

It is clear that most of the respondents felt positive about the audio medium.

4.2.2 Brochures
The findings here are again discussed according to the questions in the interview schedule. What do you like about these brochures?

When being asked what they like about the brochures, three quarters of the respondents referred to the educational and informative value of the brochures. Other reasons were: “they’re written in different languages” and “they show us what to do”. Seven responses indicated that the respondents did not read or understand the brochure, for example:

• “Tells that you must always use a condom”
• “They have the red ribbon which people usually wear. They show that you must accept if it comes to you”.

To the question “What don’t you like about these brochures?” none mentioned that they were unable to read the brochure, despite their obvious poor comprehension as indicated earlier which points to an inability to read

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proficiently. Two thirds of the respondents stated that there was nothing about the brochure that they didn’t like. The rest didn’t like the brochures because:

- it does not have enough information and
- the languages and/or photographs used in the brochures are not acceptable.

When asked, “Do you think brochures like these are the best way to communicate information about HIV/AIDS? Why?”, all of the respondents, except four, thought that brochures were the best way to communicate information about HIV/AIDS. Some of them suggested a mixed media approach. Six respondents stated that brochures were not the best way to communicate. The reasons they gave include the following:

- “People cannot all read”
- “TV and radio are better”
- Home visits would be preferable.

### 4.2.3 Comparing the acceptance of audiocassettes and brochures:

Both groups responded positively towards the medium they were exposed to. Factors such as an unwillingness to expose a low literacy level, or trying to please the interviewer could have played a role here. More indirect questions seem to yield better data. In general it seems that both media are acceptable.

### 4.3 Evaluation of Accessibility

Accessibility relates to two levels, firstly it refers to the ease of physical access to the particular medium. Secondly, it relates to a more abstract level. This can be referred to as semantic access which determines their understanding of the meaning of the message.

#### 4.3.1 Audiocassettes

With the exception of two respondents, all of the respondents who were interviewed owned an audiocassette or CD player. This indicates the physical accessibility of the audio medium.

The respondents were asked where they would expect to find audiocassettes or CD’s with health information if they were made available to the public. This question was important to the researchers, since they needed guidance on which locations could be considered if a trial phase of using audiocassettes for making health information available, should be implemented. Three quarters of the respondents stated that they would expect to find audiocassettes containing health information at clinics.

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Other places mentioned by the respondents included shops, schools, churches, community centres and libraries. Interesting places also mentioned by the respondents included radio stations, train stations, health stores/pharmacies, bars, parks, taxi ranks, streets, public places and hotels.

4.3.2 Brochures

The respondents who saw brochures as accessible gave the following reasons: “You don’t need any kind of player”; “you can read anytime you want”, “you can refer back to it” and “you can read it in private”. Other interesting reasons were that “it is available for free” and that “it is easily distributed”.

It is interesting to note that most of the respondents only referred to the physical accessibility of the brochures and few of them mentioned the fact that printed media is inaccessible to the people who can’t read.

4.3.3 Comparing the accessibility of audiocassettes and brochures:

The physical accessibility of both media is good, on the condition that it is made available to the intended users. Further research, about measures that could be taken to make audiocassettes with health information available to the general public, should be undertaken. The suggestions from the respondents as to where such projects can be deployed, for example clinics and libraries, should be taken into account.

With reference to the overall comprehension of the messages, it can be deduced that the semantic access of the audio messages was higher than that of the printed brochures.

5. Conclusion

These findings, although preliminary and exploratory, points to an unexplored potential in the use of audiocassettes as a medium to disseminate health communication to low-literates in South Africa. These findings support the hypothesis that to respondents from a country where a strong oral culture exists an audio medium is easier to understand than the printed medium.

The findings, however, indicate that there is no need to choose between orality and/or literacy. It is important to acknowledge their interwoven nature in the modern society. Ideally there should be a balance between orality and literacy and this should be visible in the messages communicating information about HIV/AIDS and other health messages to the people of South Africa. It is therefore not suggested that the audio medium substitute print, but that it could and should be used as an alternative.
Incorporating audiocassettes into the media mix of HIV/AIDS and other health communication campaigns have the potential to contribute to the overall effectiveness of a communication strategy.

6. References


10. Made SM. The state of information provision to rural communities in Anglophone East and Central Africa. In: Proceedings of the seminar on


