

Evaluating recorded audio media for health communication in South Africa

by

Maria Margaretha Claasen-Veldsman

A dissertation submitted in fulfilment of the requirements for the degree Magister Artium Development Communication in the Department of Information Science, University of Pretoria

April 2007



CONTENT

Abstract	i
Declaration	iii
Acknowledgements	iv
List of figures, graphs and tables	V
1 - Using recorded audio media for health communication	1
1.1 Introduction	1
1.2 Research question	7
1.2.1 Sub-questions	7
1.3 Aim of the research	7
1.4 Value of research	8
1.5 Research framework	8
1.6 Dissertation outline	9
1.7 Concept clarification	10
1.8 List of abbreviations	15
1.9 Summary	15
2 - Theoretical foundation	16
2.1 Introduction	16
2.2 Man as information being	17
2.2.1 Information processing	17
2.2.2 The need for information	21
2.2.3 The importance of information for development	22
2.2.3.1 Development Communication	23
2.2.4 The right of access to information	24
2.3 The communication of information	26
2.3.1 The role of the communication medium	29
2.4 Accessibility - determining the effectiveness of communication	30
2.4.1 Information presentation	31



2.4.2 Information repackaging	32
2.4.2.1 The recorded audio medium – a review of the use of audiocassett	es
as communication medium	34
2.4.2.1.1 Characteristics of the recorded audio medium and	
audiocassettes	34
2.4.2.1.2 Advantages of audiocassettes/CDs	39
2.4.2.1.3 Disadvantages of audiocassettes/CDs	42
2.4.2.1.4 Uses of audiocassettes/CDs as communication medium	43
2.4.2.1.5 Making recorded audio messages available to the public	49
2.4.2.1.6 Guidelines to create recorded audio messages	50
2.5 Summary	50
3 - Contextualisation: Health & HIV/AIDS communication	52
3.1 Introduction	52
3.2 Health communication	53
3.2.1 AIDS communication in South Africa	57
3.3 The use of brochures in development and health communication	58
3.3.1 Advantages of brochures	60
3.3.2 Disadvantages of brochures	61
3.3.2.1 Visual disability – a physiological barrier to	
access printed information	61
3.3.2.2 Literacy – a marginalising skill?	63
3.3.2.3 Orality – a cultural and sociological process	67
3.4 Brochures and audiocassettes/CDs as alternative media?	69
3.5 Summary	72
4 - Research design & methodology	73
4.1 Introduction	73
4.2 Research approach	73
4.3 Research design	75
4.4 Research methodology	76
4.4.1 Selection & production of the audio messages	77



4.4.2 Selection of the research location	78
4.4.3 Sampling of the research participants	79
4.4.4 Data collection methods	81
4.4.4.1 Individual interviews	81
4.4.4.1.1 Interview schedule for the audiocassette/CD evaluation	82
4.4.4.1.2 Interview schedule for the brochure evaluation	85
4.4.4.1.3 Conducting the individual interviews	86
4.4.4.2 Focus group interviews	87
4.4.4.2.1 Conducting the focus group interviews	88
4.4.5 Data analysis	89
4.4.5.1 Data analysis methods	89
4.4.5.2 Process of data analysis	90
4.5 Limitations of the study	92
4.6 Summary	93
5 - Findings	95
5.1 Introduction	95
5.2 Findings of the individual interviews	95
5.2.1 Demographic data	95
5.2.1 Demographic data 5.2.1.1 Individual factors	95 96
5.2.1.1 Individual factors	96
5.2.1.1 Individual factors 5.2.1.1.1 Gender distribution	96 96
5.2.1.1 Individual factors 5.2.1.1.1 Gender distribution 5.2.1.1.2 Mother tongue language	96 96 97
5.2.1.1 Individual factors 5.2.1.1.1 Gender distribution 5.2.1.1.2 Mother tongue language 5.2.1.1.3 Age	96 96 97 99
5.2.1.1 Individual factors 5.2.1.1.1 Gender distribution 5.2.1.1.2 Mother tongue language 5.2.1.1.3 Age 5.2.1.1.4 Level of education/ schooling	96 96 97 99 100
5.2.1.1 Individual factors 5.2.1.1.1 Gender distribution 5.2.1.1.2 Mother tongue language 5.2.1.1.3 Age 5.2.1.1.4 Level of education/ schooling 5.2.1.2 Social factors	96 96 97 99 100 101
5.2.1.1 Individual factors 5.2.1.1.1 Gender distribution 5.2.1.1.2 Mother tongue language 5.2.1.1.3 Age 5.2.1.1.4 Level of education/ schooling 5.2.1.2 Social factors 5.2.1.2.1 Monthly income	96 96 97 99 100 101
5.2.1.1 Individual factors 5.2.1.1.1 Gender distribution 5.2.1.1.2 Mother tongue language 5.2.1.1.3 Age 5.2.1.1.4 Level of education/ schooling 5.2.1.2 Social factors 5.2.1.2.1 Monthly income 5.2.1.2.2 Employment	96 96 97 99 100 101 101 103
5.2.1.1 Individual factors 5.2.1.1.1 Gender distribution 5.2.1.1.2 Mother tongue language 5.2.1.1.3 Age 5.2.1.1.4 Level of education/ schooling 5.2.1.2 Social factors 5.2.1.2.1 Monthly income 5.2.1.2.2 Employment 5.2.1.3 Health care	96 96 97 99 100 101 101 103 105



5.2.2 Evaluation of the texts	108
5.2.2.1 Comprehension	108
5.2.2.2 Acceptability	146
5.2.2.2.1 Acceptability of the recorded audio messages	147
5.2.2.2 Acceptability of the brochures	153
5.2.2.3 Accessibility	155
5.2.2.3.1 Physical accessibility of audiocassettes/CDs	156
5.2.2.3.2 Semantic accessibility of the audiocassettes/CDs	160
5.2.2.3.3 Physical accessibility of the brochures	160
5.2.2.3.4 Semantic accessibility of the brochures	161
5.3 Findings of the focus group interviews	162
5.4 Summary	163
6 - Conclusion and recommendations	164
6.1 Introduction	164
6.2 Conclusions	164
6.2.1 Sub-question 1 - How effective is print-based health communication in	
South Africa?	164
6.2.2 Sub-question 2 - How effective is the recorded audio medium in health	
communication?	166
6.2.3 Sub-question 3 - Can audiocassettes/CDs be employed to communica	te
health information to the general public?	167
6.3 Recommendations	168
6.3.1 Taking the target audience into account	168
6.3.2 Improving the audio messages	169
6.3.3 Making the recorded audio messages available to the public	170
6.3.3.1 Recorded audio messages available for personal use	170
6.3.3.2 Recorded audio messages available for public use	171
6.3.3.2.1 Individual listening	171
6.3.3.2.2 Group listening	172
6.3.3.3 Suggestions of participants to make recorded audio messages	
available	172



6.4 Suggestions for further research	173
6.5 Conclusive statements	174
7 – References	178
8 – Appendices	194
8.1 Appendix A – Brochures (original texts) used in the study	194
8.2 Appendix B – Interview schedule: Audiocassette/CD evaluation	198
8.3 Appendix C – Interview schedule: Brochure evaluation	204



ABSTRACT

Evaluating recorded audio media for health communication in South Africa

by Retha Claasen-Veldsman

M.A. Development Communication, dissertation.

Department of Information Science, University of Pretoria.

This dissertation reports on an exploratory study investigating the potential of recorded audio media (i.e. audiocassettes/CDs) as a method of health communication in South Africa. The investigation examines recorded audio media as an alternative to printed brochures. People need access to information in order to make informed decisions about their health. In South Africa, the high HIV/AIDS infection rate is a case in point.

The literature review deals with the accessibility of information in terms of physical accessibility (whether the receiver can find, operate and use the communication medium); and semantic accessibility (whether the receiver understands the message disseminated via the medium). Through the review, it was discovered that, where necessary, information must then be repackaged from an inaccessible to an accessible and appropriate format. Factors like visual disabilities, low levels of literacy and low reading proficiency, can render printed information inaccessible.

This study discusses and researches the feasibility of recorded audio media (audiocassettes/CDs) as an alternative to print-based brochures by means of a comparative literature review and empirical study. Selected HIV/AIDS brochures (developed by the Department of Health) and similar recorded audio messages were evaluated amongst the target audience in order to compare the comprehension of the messages, the accessibility and acceptability of both media forms.

i



The study was conducted at four public health clinics, where individual structured interviews and focus group interviews were employed as data collection methods. The data was analysed by means of qualitative content analysis.

The findings indicate the definite potential of the use of recorded audio media in health and HIV/AIDS communication, and should be explored further. The comprehension of the audio messages was better than that of the printed brochures indicating the semantic accessibility of the audio messages. The positive reaction of the research participants toward the recorded audio messages also indicates the acceptability of the medium. Incorporating audiocassettes into the media mix of HIV/AIDS and other development and/or health communication campaigns, will contribute to the overall effectiveness of the communication strategy.

Keywords

Acceptability, accessibility, audio, audio messages, audiocassettes, brochures, CDs, comprehension, evaluation, exploratory research, health communication, HIV/AIDS, recorded audio messages, usability testing

April 2007



DECLARATION

I hereby declare that the dissertation entitled:

Evaluating recorded audio media for health communication in South Africa

- i. Is my own work
- ii. Has not been submitted before for any degree or examination in any other university
- iii. All the sources consulted and quoted from, have been acknowledged and referenced.

Retha Claasen-Veldsman April 2007



ACKNOWLEDGEMENTS

I would like to extend sincere and heartfelt thanks to everyone who encouraged, supported and guided me through the process of completing this study:

- My study leader, Prof Maritha Snyman
- The National Research Foundation (NRF) for financial support.
- Colleagues at the Department of Information Science,
 University of Pretoria
- My husband Johan Veldsman, family and friends

To God all the Glory

Retha Claasen-Veldsman April 2007



LIST OF FIGURES, GRAPHS AND TABLES

Figure 1 - Model of the human as information processor	18
Figure 2 - Juxtaposing information needs to Maslow's hierarchy of basic	21
human needs	
Figure 3 - Transactional communication model	27
Figure 4 - Mass communication model	28
Figure 5 - Health communication processes	57
Figure 6 - Distribution of the population aged 20 years and above by	65
highest level of education completed	
Graph 1 - Gender distribution: Audiocassette/CD evaluation	96
Graph 2 - Gender distribution: Brochure evaluation	96
Graph 3 - Gender distribution	97
Graph 4 - Mother tongue languages: Audiocassette/CD evaluation	98
Graph 5 - Population groups: Brochure evaluation	98
Graph 6 - Age categories: Audiocassette/CD evaluation	99
Graph 7 - Age categories: Brochure evaluation	99
Graph 8 - Level of education/schooling: Audiocassette/CD evaluation	100
Graph 9 - Level of education/schooling: Brochure evaluation	100
Graph 10 - Level of education/schooling	101
Graph 11 - Monthly income: Audiocassette/CD evaluation	102
Graph 12 - Monthly income: Brochure evaluation	102
Graph 13 - Monthly income	103
Graph 14 - Employment of the participants of the audiocassette/CD evaluation	104
Graph 15 - Employment of the participants of the brochure evaluation	104
Graph 16 - Healthcare facilities visited by participants of the	105
audiocassette/CD evaluation	
Graph 17 - Healthcare facilities visited by participants of the brochure	105
evaluation	
Graph 18 - Healthcare facilities visited by the participants of both	106
the Audiocassette/CD and the Brochure evaluations	



Graph 19 - Sources of health information: Audiocassette/CD evaluation	107
Graph 20 - Ownership of an audiocassette/CD player	157
Graph 21 - Places where audiocassettes/CDs with health information	158
are expected to be available	
Table 1 - Comparison between responses for Question 1	111
Table 2 - Examples of own conceptualisations for Question 1	112
Table 3 - Comparison between the recall of Group A and Group B	113
for Question 1	
Table 4 - Comparison between the prevalence of responses not stated	114
in the texts for Question 1	
Table 5 - Comparison between responses for Question 2	115
Table 6 - Examples of own conceptualisations for Question 2	116
Table 7 - Comparison between the recall of Group A and Group B for	117
Question 2	
Table 8 - Comparison between the prevalence of responses not stated	118
in the texts for Question 2	
Table 9 - Comparison between responses for Question 3	121
Table 10 - Examples of own conceptualisations for Question 3	121
Table 11 - Comparison between the recall of Group A and Group B for	123
Question 3	
Table 12 - Comparison between the prevalence of responses not stated	123
in the texts for Question 3	
Table 13 - Comparison between responses for Question 4	125
Table 14 - Examples of own conceptualisations for Question 4	125
Table 15 - Comparison between the recall of Group A and Group B	126
for Question 4	
Table 16 - Comparison between the prevalence of responses	127
not stated in the texts for Question 4	
Table 17 - Comparison between responses for Question 5	129
Table 18 - Examples of own conceptualisations for Question 5	129
Table 19 - Comparison between the recall of Group A and Group B	131
for Question 5	



Table 20 - Comparison between the prevalence of responses	131
not stated in the texts for Question 5	
Table 21 - Comparison between responses for Question 6	133
Table 22 - Examples of own conceptualisations for Question 6	134
Table 23 - Comparison between the recall of Group A and Group B	135
for Question 6	
Table 24 - Comparison between the prevalence of responses	136
not stated in the texts for Question 6	
Table 25 - Comparison between responses for Question 7	138
Table 26 - Examples of own conceptualisations for Question 7	138
Table 27 - Comparison between the recall of Group A and Group B	139
for Question 7	
Table 28 - Comparison between the prevalence of responses	140
not stated in the texts for Question 7	
Table 29 - Comparison between responses for Question 8	143
Table 30 - Comparison between the recall of Group A and Group B	144
for Question 8	
Table 31 - Comparison between the prevalence of responses	145
not stated in the texts for Question 8	



1 – Using recorded audio media for health communication

1.1 Introduction

In the National Health Plan for South Africa (African National Congress (ANC), 1994) it is noted that health promotion and education are seen as being very important to increasing the national well being and health of South African citizens. The plan states that, "the ANC is committed to the promotion of health through prevention and education," and, that a "special emphasis in all health programmes and activities at all levels in the system will be given to health promotion" (ANC, 1994: 19). Health promotion can be seen as an umbrella term encompassing aspects such as legislation, advocacy, policy, education, and communication (Coulson, Goldstein & Ntuli, 1998). The National Health Plan for South Africa (ANC, 1994:41) also stipulates that, "within primary health care the role of health promotion should encompass responsibility for community participation, community development, intersectoral development, education, mass media campaigns, disease prevention and health promotion in specific areas such as women's health, HIV/AIDS, adolescent health, etc."

Information plays a central role in all the above-mentioned facets of health promotion and communication. Access to information not only empowers individuals, but also plays an integral part in community and national development and, in that light, can be considered a basic human right (Britz, 1996). This means that people must have access to information in a format, medium, and language that is acceptable to them and understood by them. The South African public has a need for health information and, with regard to the light of the HIV/AIDS crisis, adequate and accessible information on this disease is imperative.



HIV/AIDS has reached epidemic proportions in South Africa. With an estimated 1700 people newly infected with HIV per day, South Africa has the highest burden of HIV/AIDS on the African continent (Abdool Karim & Abdool Karim, 2005: 37).

According to the *South African National Burden of Disease Study 2000: Estimates of Provincial Mortality* (Bradshaw et al, 2004), HIV/AIDS was, in the year 2000, the leading cause of death in all the South African provinces excluding the Western Cape. In the Gauteng province, regarded as the centre of the country's economy, HIV/AIDS was not only the leading cause of death among adults, but also among children, amounting to 33% of deaths (Bradshaw et al, 2004: 59). It was reported in the newspaper *Beeld* (Pienaar, 2005: 6) that approximately 47% of all deaths in 2005 would be caused by HIV/AIDS according to an estimate by the Medical Research Council (MRC) and the Actuarial Association of South Africa (ASSA). If the spread of HIV/AIDS is not curbed, these statistics have dire implications for our country.

As there is no cure available for HIV/AIDS, prevention of infection and spread of the virus is one of the most important ways to try to combat the disease.

Information and awareness play a central role in this regard. According to De Haan (1996: 18), "Health education is the basis of preventive medicine and an important component of primary health care." Health education and prevention can be divided into three categories, namely primary, secondary and tertiary prevention. Primary prevention "is usually undertaken by providing information and education and concentrates on preventing ill health or infection from occurring at all, and usually has individual behaviour change as its goal.

Examples of primary prevention activities are immunisation campaigns, and the promotion of using condoms to prevent infection with HIV/AIDS and other STDs" (Coulson, Goldstein & Ntuli, 1998: 6). Secondary prevention comprises of diagnosis and treatment of disease; whereas tertiary prevention consists of rehabilitation and prevention of further complications and deterioration (De Haan,



1996; Coulson, Goldstein & Ntuli, 1998). It is on the level of primary prevention that this research will be based.

It is stated in the *National Health Plan for South Africa* (1994) that, "promoting good health and preventing disease is central to the success of Primary Health Care." The ANC (1994: 42) also states that, "prevention and education should be part of an overall strategy to prevent the transmission of HIV through public awareness campaigns, community-based prevention initiatives and improved infection control procedures."

HIV awareness campaigns, like other health campaigns, use various media and methods to communicate to the public. One of the main methods includes the use of printed brochures. With reference to the Beyond Awareness AIDS Campaign, the "bulk of the small media budget was spent on leaflets," (Carstens & Snyman, 2003: 114). Carstens & Snyman (2003) investigated the effectiveness of the brochure HIV/AIDS and Counselling as developed by the National Department of Health. They found that the text was not easy to understand and that poor comprehension had a negative impact on the effectiveness of the brochure. According to a study done by Aitchison (2001), a substantial portion of the South African public can be seen as illiterate or semi-literate. Sisulu (2004) states that, "South Africa has at least 3 million adults who are completely illiterate - unable to read the instructions on a medicine bottle." In addition, an estimated "5-8 million is functionally illiterate – unable to function adequately in the modern world due to under-developed reading and writing skills." She also mentions that there are "tens of millions of South Africans who are aliterate – able to read but who don't read." In the light of the above-mentioned arguments, it is appropriate to ask, how effective can these HIV/AIDS awareness leaflets and brochures be if people cannot or even prefer not to read?

Melkote (1991: 218) furthermore argues that in Africa the "pro-literacy bias has acted as a major constraint to the diffusion of information to pre-literate

University of Pretoria etd – Claasen-Veldsman, MM (2007)



audiences...which forms the bulk of the population in rural areas." Made (1994: 32) also points out that there has been, in the dissemination of information in Africa, an over-reliance on the printed word.

Print media, generally in the form of brochures and leaflets, is one of the most common forms of information dissemination to the South African public. The information contained in these brochures ranges from self-made business advertisements to professional media campaigns. Brochures, pamphlets, or flyers are seen as a cheaper form of mass communication, which have the potential to reach a large audience. They do not require sophisticated technology to access the information and can be kept as a permanent reminder or reference (Morris & Stilwell, 2003; Snyman, 2002 & Leach, 1999a&b). Various authors, including Morris & Stilwell (2003), Snyman (2002), Leach (1999a&b) and Omosa (1998), discuss the use of brochures in development work. Along with illiteracy, barriers that prevent the intended message from reaching the target audience include the cultural differences when decoding verbal and visual images. Although brochures are viewed as a potential source of information, a preference for personal communication and visual media is indicated.

Print media alone may be sufficient for use in literate communities, but put illiterates at a great disadvantage (FAO, 1989). De Haan (1996: 17) states that although the written word is often used in health education, "it is of no value if the community is illiterate." As a medium for health and development communication in South Africa, brochures must be used with caution. In their book *The quiet struggle: information and libraries for the people of Africa,* Sturges and Neill (1998:121) explicitly address the problem of in "what forms" information should be delivered in Africa and contend that, "it is absolutely clear that the delivery method employed by any innovative information service…must be essentially oral."



These views are supported by two South African studies. Leach (1999b: 85), in his study, *The provision of Information to Adults in Kwa Zulu-Natal* found that, "(d)espite the apparent influence of the printed word, the oral mode still predominates, most notably among the rural population." Maepa's study (2000) on *Information needs and information-seeking patterns of rural villagers living in the Northern Province* reaffirms the notion 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. This links to a study done by Jiyane & Ocholla (2004) who explored the information needs of women in Melmoth, rural KwaZulu-Natal. The women stated that friends, neighbours, and relatives were their preferred sources of information. Illiteracy was stated as a barrier to access information in printed form, although the women indicated a preference for interpersonal communication, which ties to a cultural preference of oral information transfer.

To make informed choices about their health and related behaviour, South African people must be informed. To achieve this they must have access to useful and relevant information. Where necessary, information must be repackaged in an acceptable and appropriate format. Onwubiko (1999) discusses the importance of information repackaging for librarians and information workers in Nigeria. He emphasises the need for health information, specifically HIV/AIDS information, and states that, "all the remodeled information should be provided in large print posters, films, video and audiocassettes, and in the local language of the people for effective results," (Onwubiko, 1999: 191).

The FAO (1989) also considers the use of audiocassettes as a development communication. They are seen as a very good low cost medium of which the potential has not been sufficiently recognised. This is emphasised by Leach (1999b: 79) who states: "seeing that audiocassettes do not require sophisticated

University of Pretoria etd – Claasen-Veldsman, MM (2007)



technology or literacy skills, the use of this medium must be investigated within the rural South African context."

The potential of audiocassettes to provide information to illiterate communities in South Africa was discussed by Du Plooy (1988). Proposed topics for such communication included advice and legal services, health and taxation.

Urgoiti (1991) discusses the use of audiocassettes as part of primary health education. A study was conducted in the Xhosa speaking communities of the Western Cape as to the acceptability and effectiveness of audiocassettes as communication medium. An audiocassette containing a recorded audio message on neonatal jaundice was used in the evaluation and it was found that, "there is a dramatic gain in knowledge of neonatal jaundice after exposure to the tape," Urgoiti (1991: 110). The study emphasises the potential of audiocassettes within health education and also states that audiocassettes can be used effectively in conjunction with other media, like community radio, as part of multi-media health campaigns.

Other, international, studies on the use of the recorded audio media as communication medium will be discussed in section 2.4.2.1.

It should be noted that although recorded audio media in the form of audiocassettes/CDs¹ on health matters can be ordered from private companies and/or the Internet, for example from amazon.com, it is not used for mainstream, public health communication in South Africa.

Based on the above discussion, the assumption can be made that recorded audio media (in the form of audiocassettes/CDs) may have the potential to play an important role in public health communication in South Africa. Incorporating

¹ Although the older technology of audiocassettes is still in use, it is being replaced by compact discs (CDs) and the two concepts can be seen as interchangeable.



recorded audio media will not only add to the media mix² of health communication campaigns, but it could also be to the advantage of the illiterate/low-literate, and the visually impaired.

1.2 Research question

This research project, therefore, wants to investigate the possibility of using the recorded medium in the form of audiocassettes/CDs, as an alternative medium to printed brochures for the dissemination of health information, with specific focus on the communication of HIV/AIDS and related issues to the general public of South Africa.

The research question to be addressed is:

Can recorded audio media (audiocassettes/CDs) be used as an alternative to brochures in the dissemination of health information in South Africa?

The following sub-questions are linked to and based on this main research question:

1.2.1 Sub-questions

- How effective is print-based health communication media in South Africa?
- How effective is recorded audio media in health communication?
- Can recorded audio media (audiocassettes/CDs) be employed to communicate health information to the general public?

1.3 Aim of the research

This study aims to determine whether audiocassettes can be used as an alternative to print-based media in public health communication in South Africa as part of primary prevention. It will take the form of a case study in which

² Media mix refers to the various media forms that are used within a communication campaign.



selected HIV/AIDS brochures (developed by the Department of Health) and similar recorded audio messages will be compared to evaluate the comprehension, accessibility, and acceptability of both media forms.

1.4 Value of research

There are few investigations into the use of recorded audio media i.e. audiocassettes/CDs and its acceptance and efficiency as a medium of health communication in South Africa. In fact, as far as could be established, the study conducted by Urgoiti (1991), was the only study investigating the use of the recorded audio medium in health communication.

Since, as indicated, very few studies have been conducted into this topic and audiocassettes/CDs are not generally used, this study has the potential to enrich the field of South African health communication. This study may provide new information about the potential of the recorded audio medium. Not only may the use of audiocassettes/CDs in health communication provide an additional means of access to health information that may be to the advantage of the general public; but the illiterate and visually disabled, may especially benefit from health information that is provided in a more accessible format.

1.5 Research framework

This study formed part of a project on the evaluation of printed health messages funded by the National Research Foundation (NRF), with the purpose to evaluate the effectiveness of HIV/AIDS awareness brochures developed by the Department of Health and distributed at public health clinics. Two researchers were involved in two similar, but independent studies.

This dissertation reports on the findings of the study that explored and evaluated the possible use of recorded audio media as alternatives to the brochures



currently used in HIV/AIDS campaigns. It used the raw data of the study which simultaneously researched the effectiveness of the brochures. The study regarding the effectiveness of the HIV/AIDS brochures was conducted by a medical doctor in fulfilment of a Masters' Degree in Public Health.

Although these two studies were conducted independently of each other, they took place at the same time and at the same clinics in order to be cost effective. The sampling of participants, data collection methods, and the processes followed at each of the clinics were the same for both studies and will be discussed in Chapter 4.

In the exploration of the use of recorded audio media in health communication, both a literature review and an empirical study were conducted. In the latter, recorded audio messages, based on existing HIV/AIDS brochures were evaluated in terms of comprehension, acceptability, and accessibility. The primary data was collected by means of semi-structured individual interviews as well as focus group interviews; and the data was analysed by means of qualitative content analysis.

1.6 Dissertation outline

This study is presented in two main parts. The first part consists of the literature review in which the theoretical foundation is laid. The second part comprises the empirical study and the discussion of the findings.

Chapter 2 consists of the theoretical background in which the importance of information for individual development and empowerment is highlighted. The accessibility of information and the role of the communication medium are discussed. A way to make information more accessible is to repackage it in an accessible medium or format. The recorded audio medium in the form of audiocassettes/CDs is suggested as an alternative



to brochures, and is consequently discussed as a medium for health and development communication.

- In Chapter 3, the study is contextualised, with reference to health and HIV/AIDS communication. The use of brochures in health and development communication is discussed and the use of audiocassettes/CDs as part of the media mix of health communications and as an alternative to brochures is suggested.
- In Chapter 4, the research process is described. A detailed discussion of the data collection methods and the analysis of the data is provided.
- The research findings are discussed in Chapter 5.
- Conclusions and recommendations are made in Chapter 6.
- There then follows the reference list and appendices.

1.7 Concept clarification

- In this study, the terms "audiocassettes" and "CDs" are used interchangeably and refer to "recorded audio messages." In this regard, "audiotapes" and "audio taped instructions" are also used as synonyms for audiocassettes.
- Reference is made throughout this study to the concept "text." This does not only refer to printed text, but also include audio texts. "Text can exist in any medium and may be verbal, non-verbal, or both," and, "usually refers to a message which has been recorded in some way (e.g. writing, audio- and video-recording) so that it is physically independent of its sender or receiver" (Chandler, 1994).
- It is important to identify and discuss the basic components of the communication process, as reference to these concepts will be made throughout the study. The following discussion of the components of the communication process, is based on the work of Steinberg (1995):



People

In the communication process, there is always a communicator and a recipient of a message. The communicator intentionally formulates purposeful messages and expresses them through the use of verbal and non-verbal signs. The recipient is an active participant in the process through intentionally and consciously paying attention to the message in order to understand and interpret it. In interpersonal communication, both parties fulfil the role of communicator and recipient, in that they give constant and immediate verbal and non-verbal feedback.

In mediated or mass communication, there is also a communicator and a recipient. The communicator is not a single individual, but may be an individual who is part of a team within an organisation like the Department of Health or a media organisation, for example a newspaper or television station. The recipients are also not single individuals, but large heterogeneous audiences, who are not personally known to the communicator or to each other.

Messages

The message refers to the content communicated between the parties involved. Messages have meanings that need to be understood and interpreted in order for effective communication to take place. Meaning cannot be transferred from one person to another; it is created by the receiver through decoding the signs and codes through which the communicator has formulated the message according to his or her own unique frame of reference.

In mass communication, the messages are public, and not personally addressed to specific individuals.



Signs and codes

Signs refer to those things that stand in the place of something. There are many different kinds of signs; verbal, including spoken or written words; visual, like photos; and aural, depicting different sounds etc. Codes refer to the systematic way in which signs are combined. Oftentimes such use is either based on a social convention, or it becomes a social convention, for instance grammar (Steinberg, 1995).

Owing to a variety of reasons, including culture, personal background, and experience, people do not always interpret signs in exactly the same way. In other words, they do not always derive the same meaning from a message that the communicator intended. This problem is present in both interpersonal and mediated communication. In interpersonal communication, immediate feedback helps to minimise the risk of misinterpretation or misunderstanding rendering the communication more successful. In mediated or mass communication, there is no opportunity for immediate feedback/negotiation. In the case of communication campaigns, the importance of dialoguing with the target audience when developing the message is crucial. This is called the 'audience-participatory based approach' (Mody, 1991; Snyman & Penzhorn, 2004) and is necessary to match the audience, medium, and the message (Omosa, 1998).

Encoding and decoding

This refers to the process of translating the intended message into different signs in order to transmit them to the recipient. The recipient receives the message (through the senses) and decodes the signs according to his or her frame of reference to derive meaning from the message.

Medium (and channel)

The medium can be defined as the physical means by which messages are transmitted; for example, print-based information like text or audio-based



information, like radio. Steinberg (1995) distinguishes between the medium of communication (being the physical means through which information is communicated) and the channels of communication as the vehicles through which the information travels, like sound or light waves. The concepts communication medium and channel of communication are often used interchangeably as synonyms; for example, the reference to communication channels when referring to interpersonal communication like a telephone conversation or the mass media (Tubbs & Moss, 1991; Wilson, 1997). In this study, these two terms will also be used interchangeably.

Meaning

"Meaning can be regarded as the product or result of communication," (O'Sullivan et al. in Steinberg, 1995: 17). There are different layers to the concept 'meaning,' ranging from the factual content of a message, to the more abstract level of communicating; for example, the relationship between the communicating participants.

The meaning of a message must be interpreted. Interpretation is a personal process, and is dependent on the individual recipient. The whole and unique being of the recipient will determine the way in which the meaning of the message is understood.

Once again, direct feedback will provide the opportunity to negotiate meaning between parties involved in an interpersonal (face-to-face) communication situation. This emphasises the importance of dialogue with the target audience when planning a mediated mass communication campaign for example an HIV/AIDS campaign.

Noise

In the communication process, there are various factors that can impact negatively on the effectiveness of the communication. These are generally



referred to as "noise" (Steinberg, 1995) or "interferences" (Tubbs & Moss, 1991) and are barriers preventing effective communication. There are three types of noise: internal, semantic and external noise. Internal noise is directly related to the internal being of the parties involved. This includes the personality, background, experiences, feelings, thoughts, and emotions of the parties involved. Semantic noise refers to barriers in communication resulting from the meaning of words such as unfamiliar terminology like jargon or language differences. The third type, is external noise, and refers to all external factors that have a negative impact on the communication process. Whereas the two previously mentioned types of noise concern the parties involved in the communication process, this third type of noise relates to the medium and the external environment in which the communication takes place. Noise is present in both interpersonal or face-to-face communication and mediated, mass communication.

Feedback

This refers to the response of the participants in the communication process to each other. In interpersonal communication, feedback is immediate and provides for a dynamic, interactive process. In mediated and mass communication, opportunities for feedback are very limited and there is little or no interaction between the target audience and the communicator. However, some feedback is possible, for example phoning in to a help line or writing a letter to the media organisation. This is referred to as delayed feedback.

Context

Context refers to the environment, setting, or situation in which the communication takes place. For example, the context in which this study takes place is that of health communication with specific reference to HIV/AIDS health education.



1.8 List of abbreviations

The following abbreviations are used throughout the dissertation:

- AIDS Acquired Immunodeficiency Syndrome
- ANC African National Congress
- CD Compact Disc
- DC Development Communication
- HIV Human Immunodeficiency Virus
- HIV+ Person who is HIV positive (who is infected with the HI Virus)
- STD Sexually Transmitted Disease

1.9 Summary

In this chapter the rationale for the research project, namely using audiocassettes/CDs as an accessible alternative to print based brochures for use in health communication with reference to AIDS awareness campaigns, was discussed.

The stark reality of HIV/AIDS in South Africa, as well as the low literacy level of the general public in South Africa, was introduced. Prevention of HIV infection is the only way to curb the spread of the virus; thus emphasising the importance of accessible information to help people make informed decisions with regard to their health and well-being. Although print-based brochures and leaflets are popular communication media and are widely used in awareness campaigns, the inherent barriers of the printed medium make the information inaccessible to low literates and the visually impaired. In order to overcome these barriers, audiocassettes are suggested, therefore, as a more accessible, alternative medium.

In the next chapter, the theoretical foundation for the study will be presented.



2 – Theoretical foundation

2.1 Introduction

Information Science can be seen as an interdisciplinary study field, which, in very broad terms, focuses on the following variables: the human as information generator or user; and information and its transfer or communication, including the technologies of information communication (Saracevic, 1992, Ingwersen, 1992, Vickery & Vickery, 1987). Although it is possible to study each one of these components separately, they are interrelated and interdependent on each other. This chapter is organised around these components.

Firstly, man as information being is discussed. This refers to the fact that all people need and use information in their daily lives. Not only do all people need information, but access to information can also be seen as a basic human right. The human should be regarded and acknowledged as a whole/holistic being in terms of information processing and communication. Secondly, the importance of information as a resource for personal and community development is discussed; and, thirdly, the communication of information is examined by focusing on the importance of the communication medium. The ability to access information is highlighted as a determining factor in the effectiveness of information communication. The communication medium used to communicate information also plays a role in the accessibility of the information. In this regard, information repackaging is discussed as a method to make information more accessible; recorded audio media (in the form of audiocassettes/CDs) is discussed with regard to repackaging health and development information in order to make it more accessible.



2.2 Man as information being

The concept of man as information being, relates to the statement by Debons, Horne & Croneweth (1988 cited in Black, 2006: 442) that, "all organisms are information systems..." Information and its use have stood central to Man's survival since time began. Information is needed to complete tasks and build relationships (Tubbs & Moss, 1991; Williams, 1992), it reduces uncertainty and aids in decision-making (Debons, 1988; Kellogg, 1995).

In order to use information, one first needs to internalise and process it. Information processing is very complex and has been studied from differing perspectives in various disciplines, including cognitive psychology and systems development (Davis & Olson, 1985; Kellogg, 1995). In the next section, information processing will be discussed.

2.2.1 Information processing

Irrespective of the theoretical perspective from which one views information processing, every person's perception process is unique. "The process of perception on how people select, organize and interpret information is based on their frame of reference developed from sociological, psychological, physical, emotional and environmental factors," (Qakisa, 2003: 58). It is important that when designing any system, service or information product, the human is considered as a holistic being. Culture, education, cognitive style, learning preferences, as well as other individual factors like gender, age and personality, all impact and determine the information processing styles or skills of each individual (Davis & Olson, 1985; Newby, Stepich, Lehman & Russell, 2000; Steinberg, 1995). "Learning style refers to 'preferred ways that different individuals have for processing and organizing information and for responding to environmental stimuli," (Shuell cited in Newby, Stepich, Lehman & Russell, 2000: 68). Although this concept is mostly used within an educational setting, it



indicates that different individuals process information differently and have different preferences with regard to information presentation. Thus, it can be seen that learning style impacts on all levels of information processing within any context.

Davis & Olson (1985) discuss humans as information processors within the context of management information systems design and provides the following model of a human as information processor:

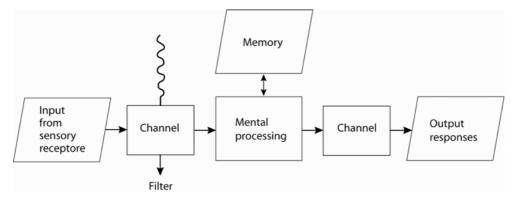


Figure 1: Model of the human as information processor (Davis & Olson, 1985: 237)

In this model, the sensory organs of the human pick up signals from the environment. These signals are transmitted to the brain and processed (mental processing). Due to the human's limited capacity to process information, "filters" block certain stimuli or, selectively, let certain stimuli through, which are then processed according to one's "frame of reference" or perception (Davis & Olson, 1985: 237; Steinberg, 1995). The results of the processing process are then called output responses.

This basic model provides insight into the process of information processing, but it is important to take into account that there are many individual factors which impact on, or influence, this process. This process simultaneously takes place on three levels and can be broken down into those physiological, cognitive, and psychological levels, all of which impact on the meaning derived from a message.



The **physiological level** refers to the physical decoding of messages. It consists of the sensory or biological process where stimuli from the external environment are taken up by the senses and decoded by the brain in order to determine meaning (Davis & Olson, 1985). As an example, when a message is heard, sound waves have entered the outer ear, and then been transmitted to the eardrum where they have been converted to mechanical vibrations and then changed to nerve impulses in the inner ear that travel to the brain where it is decoded (Heinich, Molenda & Russell, 1985; Heinich, Molenda, Russell & Smaldino, 2002). The decoding process then takes place on the cognitive and psychological level.

Simultaneously, the information processing takes place on a cognitive level. The data taken up by the senses is processed cognitively in order to understand the particular message. Various skills like literacy, reading and visual literacy are used in this level. This would be demonstrated by the ability to not only understand a text that has been read, but also to take the intended message and apply it to a specific situation.

This process of data being taken up by the senses and processed in the brain is discussed by Boon (1992) and referred to as, the "information or knowledge continuum." It is also called Taylor's "value-added model" (cited in Boon, 1992: 64) or Dedijer & Jequier's "information pyramid" (cited in Boon, 1992: 64). In this continuum, data is the raw material of information, and consists of symbols and figures. Data becomes information once a person interprets it; reading words on a page, for example. Information is thus internalised data; it makes sense to the person and is understood. Knowledge is of a higher order and is described as, "the sense people make of information," (Panos, 1998). Kaniki (1999: 191) explains information as "simply an awareness of facts or organized data which can lead a person to a state of knowing; whereas knowledge is the transformed (applied or applicable) information assimilated by a person and used in appropriate situations."



"Knowledge acquisition always occurs within a social context... and the knowledge that people acquire is always influenced by social and cultural factors, such as income, social status, ethnicity and gender," (Fallis, 2006: 484). This social context links to the psychological level of information processing.

On the psychological level, personal issues like gender, age, personality, learning style and culture all influence the way individuals process and communicate information (Newby, Stepich, Lehman & Russell, 2000; Steinberg, 1995). For instance, "... people from individualistic cultures process information differently from those from collective cultures," (Qakisa, 2003: 62). Another example is the distinction that can be made between what is referred to as an oral culture or society (associated amongst others, with indigenous African cultures) and a literate society, associated with Western cultures (Iwuji, 1990; Qakisa, 2003). The concept of orality and an oral culture will be discussed in more detail in section 3.3.2.3.

These three levels of information processing also impose various barriers that can have a negative impact on information processing. On the physiological level, being disabled or handicapped will negatively affect a person's ability to gather data from the environment. For example, being visually disabled or blind will make it impossible to read a written text like a brochure and derive meaning from it.

On a cognitive level, various factors may affect information processing. Examples include illiteracy, a definite barrier when a printed text is used to convey information, and the use of an unfamiliar language when communicating with either written or oral messages.



With reference to the psychological level, communication that does not fit into the individual's preference of information communication or information processing style, may also have a negative impact on the effectiveness of the messages.

Despite the different preferences and styles of information processing and the communication of information, all people need information. This universal need will be discussed in the next section.

2.2.2 The need for information

People need information in order to make choices, complete tasks and to establish and maintain relationships. This need for information, on an abstract level, stands parallel to the human's physiological and physical needs, because without information, physical needs cannot be fulfilled.

This relationship was identified by Horton (1983), who juxtaposed human information needs against the physiological and psychological needs of humans as depicted by Maslow's well-known hierarchy of needs. According to this pyramidal structure, as illustrated in figure 2, the lower needs (basic survival needs) must be satisfied before there is a progression to a higher order level (more spiritual needs, for example self-actualisation).

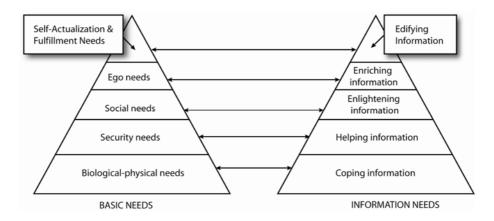


Figure 2 – Juxtaposing information needs to Maslow's hierarchy of basic human needs (Horton, 1983:15)



In this diagram, Horton (1983:15) explains that 'coping information' may be seen as "knowledge needed by individuals to cope with life's biological and survival challenges." Linked to these basic biological and physiological needs, are the basic information needs with regard to food, shelter and health information. Just like Maslow's hierarchy, these needs must be met before reaching a higher level in the pyramid. Dalton (1989) uses this study of Horton to determine at what level the information needs of a community lie. According to Dalton (1989: 24) "a developing community's information needs are mainly at the lower levels of Maslow's hierarchy. ... (A)nd will assign high priority to information that enables its members to cope with living in and understanding that community especially in matters relating to shelter, health, employment and public safety." It is thus of great importance that the general South African public, being part of a developing country with various stages of development in its different communities, have access to coping information. Coping information, with regard to health information, is critical for the development of individuals and communities.

Even though people may be consciously aware of their information needs or unaware (Kaniki, 1999), all people need information in order to reach a stage of development – whether on an individual and personal level or on a community level. In the next section, the importance of information for development will be discussed.

2.2.3 The importance of information for development

The value of information and the role it plays in development has been the topic of many books and academic writing. Timely access to relevant information is essential for development, or as Leach (1999a: 161) states, "(A) Lack of information acts as a barrier to development." This view is supported by Mchombu (cited in Leach, 1999b: 71) who states that, "information is now accepted as an important factor in the sustained development of any society because it reduces uncertainty, and enhance awareness of possible actions to



take to solve problems." Panos (1998) also rightfully indicates that, "the strength of society is dependent on a minimum level of information being available to citizens and a minimum capacity of those citizens to make sense of the information they receive and to use it."

The importance of information and communication for development is the topic of the *Communication for Development Roundtable Report* (FAO, 2005) in which Fraser & Villet (cited in FAO, 2005: 12) state, "If development can be seen as a fabric woven out of the activities of millions of people, communication represents the essential thread that binds them together…"

In order for people to have access to information, it needs to be communicated. The study field 'development communication' is centrally focused on the important role that information plays in development and studies the various methods, media, practices and aspects that play a role in the effective communication of information to individuals and the public.

2.2.3.1 Development Communication

The study field of Development Communication (DC) encapsulates a broad array of applications of information and communication to aid social development.

Colle (2002: 1) illustrates the complexity of the study field by specifically identifying seven "threads that have contributed to that fabric we call 'development communication." These threads include health communication and social marketing. These concepts will be discussed in the next chapter.

Although the history of the study field will not be discussed, this study is positioned within the paradigm of "another development or multiplicity" (Servaes, 1995 & 1999). This study is grounded in the values of the participatory communication model that has as its focus the acknowledgement of the unique



culture and characteristics of the involved people, and to include them as partners in development planning and project management (Mody, 1991; Snyman & Penzhorn, 2004).

The main aim of Development Communication is to empower people and communities and contribute to their development. It also acknowledges the basic human rights of people, including the right of access to information, without which development is impossible. In the next section, the right of access to information will be discussed.

2.2.4 The right of access to information

"The right to access to information and ideas is vital for any society. If citizens are to participate and make informed choices, they must have access to political, social, scientific, and economic information and cultural expressions. They need access to the widest range of ideas, information, and images. Freedom, prosperity and the development of society depend on education, as well as on unrestricted access to knowledge, thought, culture and information."

This statement by the International Federation of Library Associations and Institutions (IFLA) and the Freedom of Access to Information and Freedom of Expression (FIAFE) initiative is in support of Article 19 of the United Nations Universal declaration of Human Rights, affirmed on 25 March 1999 (IFLA, 2006). With reference to this statement, Nicholson (2002) states, "this ideal is unfortunately unattainable for most developing countries in the Sub-Saharan region of Africa, in their current circumstances." She states illiteracy and poverty to be problems that result in "millions of people deprived of access to information and knowledge, and hence the key to a better life," (Nicholson, 2002).



Pertaining to their right to access information, The Bill of Rights, contained in the Constitution of the Republic of South Africa (South Africa, 1996), guarantees the following to the citizens of South Africa:

Section 7 (1&2) of the Bill of Rights clearly states the equality of all people in the country and holds Government accountable for any disregard of the stated rights. Section 9, in support of section 7, emphasises the equality of people and their right to access information that is necessary to satisfy all kinds of information needs: from basic survival to self-actualization needs. This is reinforced by section 16(1) which refers to the freedom of expression and section 32(1), which states, with regard to access to information, that "(E)veryone has the right of access to any information held by the state; and any information that is held by another person and that is required for the exercise or protection of any rights."

Since the above-mentioned implies that an injustice is done to people when much needed information is inaccessible to them, Nicholson (2002) appropriately asks:

"How can equality of the law be applied, when illiterate people cannot even write their own names; cannot read the laws of the country; cannot read street-signs or vital information on medicine bottles; cannot fill out any questionnaire, application form or survey; cannot read an advertisement for employment or prepare a resume; cannot read an invoice or guarantee for any purchase made?"

This question underlines the fact that preventing people from accessing much needed information on the grounds of illiteracy, and not providing them sufficient, accessible alternatives, may be disregarding their basic human rights.

With regard to South Africa's HIV/AIDS campaigns, the "human rights approach was explicitly endorsed as being one of the guiding principles of the national HIV/AIDS Strategic Plan (2000-2005)," (Kenyon, Heywood & Conway, 2002: 162). Amongst the various behaviour changes that this approach has as its goal,



it also "seeks to empower individuals and communities with the knowledge and means to avoid infection…" (Kenyon, Heywood & Conway, 2002: 162). In order to empower people and communities with knowledge, it is important that they have access to the information communicating these empowering messages. The access that people have to information is directly linked to the communication of information. This will be discussed in the next section.

2.3 The communication of information

In order for people to have access to information, it needs to be communicated. Communication, generally, can be divided into two broad categories; direct and mediated communication. Direct communication refers to the different categories of interpersonal communication, ranging from face-to-face communication to public speaking. Mediated communication refers to all types of communication where the message is conveyed through an external, often technological, medium. This includes, for example, television, radio, and magazines. In this situation, the communicators are not physically present in each other's company. Mediated communication also covers a range of contexts, including "small media" like audiocassettes and brochures (Schramm, 1977; Parker, Dalrymple & Durden, 2000), and broadcast or mass media, in some cases also referred to as "big media" (Schramm, 1977).

There are various theoretical models depicting and explaining different aspects of communication by referring to the components of the communication process (see section 1.7). Two models, with relevance to the study, will be discussed, namely the transactional model of communication and a model explaining how mass communication works.

Although mainly referring to an interpersonal communication situation, the transactional model emphasises the importance to understand the human being in a holistic way and to take into account all the individual factors that will have



an impact on how communication messages are encoded, decoded and how meaning is determined. This valuable principle of considering the information user or target audience should be applied in any context of communication, and provides an understanding of the communication process. This model links to the participatory approach of message design (Mody, 1991; Snyman & Penzhorn, 2004), where the target audience is part of the development of the messages, whether by interpersonal, 'small' or 'mass media'.

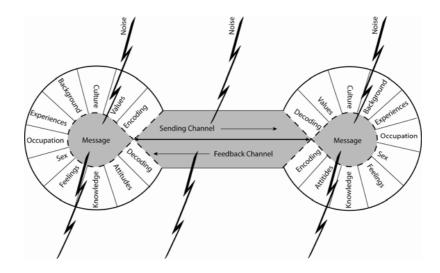


Figure 3: Transactional communication model (Steinberg, 1995: 34)

The transactional model depicts both the sender and receiver of communication as holistic beings. Various factors, for example age, gender, and knowledge, determine how each of them will, first, encode a message and then consequently decode a message, determining the meaning. This principle should be applied not only in interpersonal communication, but also in mass communication.

In contrast to interpersonal communication (where communication is two-way through the use of immediate feedback), in mass communication, for example an awareness campaign, the communication is mainly one-way. The following model depicts the process of mass communication and is explained as follows:



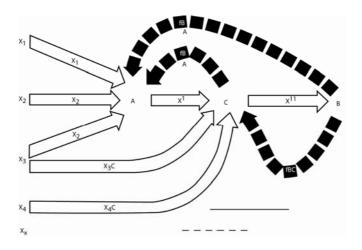


Figure 4: Mass communication model (Steinberg, 1995: 185)

A is the communicator, for example the Department of Health. They want to transmit a message (X') to a mass audience (B) – e.g. the general South African public – about a specific issue or event (X1, X2, X3, X4), like HIV/AIDS and related issues. It is not possible for A to reach the target audience (B) directly and in person. The message is then directed to a media organisation (C), which repackages it into a certain media format; for example, a television programme or newspaper article. In the case of this study, the messages were repackaged into brochures. The message (X") is then transmitted or delivered to the mass audience. There is little feedback, and if there is, it is a delayed and/or relayed process. It is not always possible to give direct feedback to the communicator (fBA); the feedback is then communicated to the media organisation, which then communicates it to the communicator (fCA). Feedback can also be through writing letters or telephoning either the communicator or the media organisation (Steinberg, 1995).

Tubbs & Moss (1991) regard communication as effective when the receiver's meaning corresponds as closely as possible to the sender's intended meaning. Although the perfect sharing of meaning is very difficult, and almost impossible to attain, it should be the ideal in any communication endeavour to get as close as possible to the sharing of meaning.



In order for a message to be effective, it needs to be understood. Although there are various factors, already discussed, which influence the way meaning is determined, access to the message is the first determining factor. Without access to the message, there is no way a person can derive meaning from it. A message is always contained and carried within a medium (Williams, 1992). This causes the communication medium to play a very important role in the communication of messages. This role will be discussed in the next section.

2.3.1 The role of the communication medium

Mass or mediated communication can be seen as "an encounter with a medium and a message..." (Steinberg, 1995: 184).

There is a variety of communication media available and each of these, depending on the context and the target audience for whom the messages are intended, has their own set of advantages and disadvantages. In order "to communicate, there should be proper matching of audience, message and medium" Omosa (1998). This is emphasised by Onwubiko (1999) who states that the format in which information is provided, should fit their literacy level, knowledge base etc.

The effectiveness or success of a message greatly depends, first of all, on the medium which conveys it, and secondly on the ability of the target audience to understand the meaning of the message. In order to understand the meaning of a message, the user must be able to access it. This concept is referred to generally (and in this study) as accessibility. Accessibility can be seen as the core of communication effectiveness, and refers to the ease of access to the medium, and the message as contained in the medium. This concept will be discussed in the next section.



2.4 Accessibility - determining the effectiveness of communication

The accessibility of information messages is determined on two levels, namely physical accessibility and, what will be referred to here as semantic accessibility. Semantic accessibility refers to accessing the meaning of the message. This term was derived from the concept "semantic noise" (Steinberg 1995: 19) which refers to interferences or barriers in the communication process when people do not understand the meaning of a message.

- Physical accessibility relates to the communication medium and refers to the following:
 - The ease of access to the communication technology through which the message can be accessed, for example a television set, radio, or computer. A medium is physically inaccessible when the target audience does not have access to the object or technology containing the information; or when other external factors keep them from accessing the information, for example, the inability to use a television set where there is no electricity
 - □ The physiological ability of a person to access the medium, for example to be able to see and read a printed text and to be able to hear and listen to an audio message.

It is important to state that without physical accessibility to the medium, the transfer of information and consequently, communication is not possible. However, equally important, is the fact that physical accessibility alone does not guarantee effective communication. Semantic accessibility is often more of a determining factor in the effectiveness of communication.

Semantic accessibility is determined by the receiver. If a receiver cannot
make sense of a message (i.e. understand a message) no communication
takes place. Meaning is a negotiated process and calls for participation



between communicator and receiver (Mody, 1991; Servaes, 1995). The fact that meaning lies within the receiver, is also addressed in the field of Semiotics (Chandler, 1994) and Reception Studies (Iser, 1978; Jauss, 1982 & Petersen, 1992). Semantic accessibility refers to individual as well as audience-related factors, such as the audience's logic, language, and experience (Doak, Doak & Root, 1996; Mody, 1991).

A person's ability to decode the message as conveyed through the physical medium is determined by various factors, including the following:

- □ Skills and level of education, for example literacy skills (Nicholson, 2002)
- Unique knowledge base and past experiences also referred to as a horizon of expectations in Reception Studies (Jauss, 1982)
- Individual learning style and preference of communication.
- Cultural factors including language use; preference for the way in which information is communicated, for example an oral culture placing a high value on interpersonal oral communication (Qakisa, 2003, Schutte, 2003; Sturges & Neill, 1998) in Semiotics this is, generally, referred to as the intersubjective community (Chandler, 1994).

In this section, accessibility was discussed. Although physical and semantic accessibility cannot guarantee that communication will be effective, effective communication is not possible if the medium and/or the message are not accessible.

2.4.1 Information presentation

"Information presentation" refers to the treatment of the content in a specific medium: the format or style in which that information is presented, as well as the medium through which it is communicated.



In any communication context, the way information is presented to the target audience is of great importance for effective communication. This is emphasised by Mchombu (1992: 29) who states that: "relevant content must be supported by appropriate presentation if information products are to have the desired impact. The content might be right, but if the presentation is inappropriate the communication process will not be successful." Sturges & Neill (1998: 206) state that, "the nature of the packages into which information is placed for the benefit of users is crucial in provision of information service to the whole community."

If the presentation of an information product is not effective, and thus not accessible in terms of the medium and/or the message, it can be repackaged in order to make it more accessible. The concept "information repackaging" will be discussed in the next section.

2.4.2 Information repackaging

Information repackaging is linked to the presentation of the information and is used to make information more accessible. Stilwell (1999: 42) provides a comprehensive overview of the concept and aptly refers to the concept as, "making information available to illiterates and other groups for whom the usual format used for conveying the information would pose a barrier to access."

According to Aboyade (cited in Onwubiko, 1999: 188), information repackaging is "the collection and redesigning, remodeling, restructuring, reorganization and dissemination of information to a peculiar group of people taking into cognisance the socio-economic, cultural and political background of the people." Sturges & Chimseu (1996: 87) use the term "information consolidation" as discussed by Saracevic & Wood, which refers to "a text or message purposefully structured from existing public knowledge to affect the private knowledge and decision of individuals who otherwise may not be able to effectively and efficiently use this public knowledge from the original accounts."



It is important to note that information repackaging not only refers to the content, but also to the format of the information, including the communication medium (Stilwell, 1999). In other words, information that is currently in an inaccessible medium should be repackaged into another more accessible medium. Print is an example of a media form that is inaccessible to the illiterate and low literate, as well as those with a low reading proficiency and the absence of a reading culture. Suggestions for more accessible media for use in these kinds of communities include a variety of oral, audio, audio-visual, and multi-media material (Stilwell, 1999; Sturges & Neill, 1998).

Onwubiko (1999) discusses the need for information repackaging in Nigeria, due to a high rate of illiteracy in the country. He states that the repackaging of information will lead to the "effective and full utilisation of remodeled information; and that the concomitant result of this will be its contribution to the elevation of the socio-economic image of rural Nigeria," (Onwubiko, 1999: 188).

Onwubiko (1999), with specific reference to health information, mentions family planning and AIDS prevention as important topics to repackage. He recognises the oral culture amongst the people in Nigeria and names audiocassettes as one of the media into which the needed information should be repackaged. According to Onwubiko it seems as if the repackaging of information involves a choice of the most appropriate medium needed in a specific context. In Nigeria, where an oral culture exists, he advises audiocassettes as a more suitable medium than for instance the printed medium.

Depending on the context and the type of message, all forms of media can be used for information repackaging. In this study, the repackaging of printed information into a recorded audio format will be investigated. The recorded audio medium, in the form of audiocassettes and CDs will be discussed in the next section.



2.4.2.1 The recorded audio medium – a review of the use of audiocassettes as communication medium

Audiocassette technology has been used a lot as part of development communication strategies, especially in the 1970's-1980's (Adhikarya & Colle, 1983; Banerjee, 1977). The enthusiasm at that time for the use of audiocassettes is captured in the words of Adhikarya & Colle (1983) who consider audiocassette technology "one of the most promising 'little media' for use in rural development programs in developing countries."

Audiocassettes are regarded as small media (Schramm, 1977) and low-tech (World Bank Institute, 2006). Newer technology is starting to replace audiocassettes; for example, audio compact discs (CDs) and even newer digital audio formats: MP3 – "an audio compression format that makes large audio files available by shrinking them into smaller files that can quickly and easily be captured on the Internet," (Heinich, Molenda, Russell & Smaldino, 2002: 177).

With an increasing focus on new developments as regards information communication technologies (ICT), it seems as if there is less focus on the reliable, available and known 'older technologies'. The words of Schramm (cited in Adhikarya & Colle, 1983: 37) may be applicable: "Studies of the least complex and least expensive media hardly exist; the more costly and glamorous media draw the lion's share of research funds." Even though audiocassettes are regarded as older technology, they are still in use and still have a lot to offer. The newer technology of CDs actually extends the life of the recorded audio medium.

2.4.2.1.1 Characteristics of the recorded audio medium and audiocassettes

From the literature, the following characteristics of recorded audio media and audiocassettes were identified:



It provides for a personalised communication encounter:

Audio messages lend themselves to a personalised form of communication. Banerjee (1977: 13) refers to audiocassettes as the "user medium" due to the intimacy of the encounter. Being an audio medium, the use of audiocassettes adds a human touch to the process of information transfer (Doak, Doak & Root, 1996; Rowntree, 1999; Scottish Council for technology, 1999). Guy (1994: 26) states that, although "the audio-tape cannot record gesture, (but) it can record a wide variety of nonverbal sound, together of course, with pace, tone and volume and therefore changes in verbal intensity in a way which is not possible in writing." Power (1999) discusses the value of the spoken word and focuses on the ability of the human voice not only to produce sound over a range of frequencies, but to be able to "adjust intonation, inflexion, phrasing, pacing, volume, loudness and timbre." This, according to Durbridge (cited in Power, 1999), "distinguishes a spoken text from a written one and... can provide it with an educational advantage." The personal nature of the communication not only makes the message more interesting, but also communicates feelings and emotions.

This personal touch can influence the listener's feelings and attitudes, which, in turn, play a role in the persuasiveness of the message. Having listeners hear the voices of important or famous people (Rowntree, 1999) for example, the State president, the Minister of Health and Sport/ Music/Television stars or AIDS activists, can also lead to more importance attached to the specific message or topic, which may impact on the persuasiveness of the message and the listener's motivation to change his/her behaviour.

Hearing other people's voices can simulate a conversation or an interpersonal encounter: a familiar and often culturally accepted form of information communication. The preference for interpersonal and oral communication links to the concept of orality or an oral culture (as discussed in section



3.3.2.3). In this light, the use of audiocassettes as a medium of communication can be considered as an example of secondary orality (Ong cited in Brown, 1998). Audiocassettes can also incorporate music, songs, and storytelling as a means of information transfer, which links with traditional communication media used in oral cultures (Meyer, 2003).

It facilitates the localisation of messages:

This characteristic is linked to the concept of personalisation, because not only does the audio medium create a personal encounter, it can adapt to and provide for specific cultures, for example; language, dialect, accent, culturally appropriate humour, stories, and music. This characteristic describes the concept "narrow-casting" as discussed by Adhikarya & Colle (1983: 10). They contrast "narrow-casting" as a means to localise messages, with "broadcasting," implying a more one-size-fits-all scenario. By using recorded audio media, messages that literally speak to a specific target group can be created and can be tailor-made to their specific context. Localised recorded audio messages, which are "representative of current issues in communities, enhances its significance to community listeners," (Urgoiti, 1991: 96).

It facilitates the expression of abstract concepts and broaching of sensitive topics:

Again linked to the personalisation of messages, audio media lend themselves to the discussion of abstract and sensitive concepts: concepts that may be problematic when conveyed in print, or in a face-to-face situation. An example of a sensitive subject is that of sexuality, which includes a wide range of topics from sexual education, family planning to sexually transmitted diseases (STDs) (Bradley et al, 1999; Collumbien & Douthwaite, 2003; Murthy, 2005). The use of audio media not only facilitates comprehension, but



may also open communication channels for further discussion and an increased understanding.

The use of audio media (including audiocassettes) stimulates a person's imagination:

One of the reasons why an audio message provides a person with a unique experience is because every person forms his/her own mental pictures during the communication encounter (Rowntree, 1999). The advantage of using "audio pictures" is that they prevent the communication product from becoming outdated, as it does not show current fashion, trends or technology that could cause the product to look old and inappropriate (Rowntree, 1999). Having one's own mental picture, is an added advantage as listeners can more easily relate the message to their own context, making it much more real and applicable. These mental pictures can be created by various aural stimuli such as the words of the audio text, characters' voices, sound effects, and music (Scottish Council for Technology, 1999).

Power (1999) discusses various ways music can be used on audiocassettes, for example:

- As an attention-getting device at the beginning of a programme
- As a theme or an audible signature
- Suggesting a place
- Suggesting a locale
- Heightening mood or atmosphere
- Punctuating speech or dialogues
- As a sound effect
- As links and bridges between segments of instruction or parts of information – aiding the organisation of the audio text.



An interesting area for future research lies in the possibility that music accompaniment on an audiocassette can increase learning or facilitate behaviour change. Power (1999) states, "it is possible that the cumulative psychoacoustics (the sensations produced by sound), psychological and physiological effects of music do influence cognition and motivation when the music is the message. And music may influence affective and cognitive interpretations when accompanying other messages." Reference is made by Thompson, Simonson & Hargrave (1992) to the use and role of background music in audio messages and the possibility that it may increase the effectiveness and efficiency of the instructional process.

Audiocassettes are versatile:

Audiocassettes are very versatile, as the media form can accommodate various styles of information presentation: drama, role play, storytelling, dialogue, poetry, narratives, music, aural stimuli like sound effects, and capturing the non-verbal qualities of oral communication like intonation, tempo of speech and voice quality (Steinberg, 1995).

Not only can it be used as a uni-directional (one-way) means of factual information transfer, entertainment or entertainment-education; it can also be used as an interactive and participatory medium. For example:

- The target audience can record their own views and questions and send it to the relevant parties. They might even react to a specific message and send their feedback to the communicator. Within a context where the target audience is illiterate or semi-literate, recording messages onto audiocassettes/CDs empowers them and provides them a voice, which would not have been possible if they had to put their views or requests in writing
- Audiocassettes can be used as part of participatory work. For example,
 fieldworkers can make recordings in the field or the communities where



they work and then use these recordings to create localised and personalised audio material (Urgoiti, 1991).

Adhikarya & Colle (1983: 18,20) discuss the interactive use of audiocassettes and describe the process as "feedforward information – i.e. inputs from the agricultural extension workers regarding farmers' problems and information needs," and "feedback information – regarding the audience's reactions as well as the usefulness and results of the information contained in the pre-recorded cassettes…" Audiocassette recorders are then used to record feedback from the target audience.

2.4.2.1.2 Advantages of audiocassettes/CDs

In addition to the characteristics discussed in the previous section, the following advantages of using the recorded audio medium can be identified. Although a lot of reference from the literature is made to the use of audiocassettes specifically, the advantages can be applied to the use of CDs as well.

Audiocassettes are accessible to illiterate and semi-literate people, the visually disabled and those who prefer not to read:

The use of audiocassettes overcomes the barriers of literacy (Adhikarya & Colle, 1983; AMC Cancer Research Center, 1994; Banerjee, 1977; Collumbien & Douthwaite, 2003; Collumbien, Douthwaite & Khan, 1999; Doak, Doak & Root, 1996; Urgoiti, 1991). Audiocassettes are not marginalising, but inclusive. Both the literate and illiterate alike can make use of them. Sturges & Neill (cited in Leach, 1999b: 83) observe that audiocassettes "offer immediate benefits in that they communicate in a 'familiar way to people who then need not feel disadvantaged by their poor or non-existent reading ability."



Doak, Doak & Root (1996) acknowledge the potential of audio taped instructions as a medium to convey healthcare messages, especially in a context where there are functionally illiterate people and people with marginal literacy skills. They state the following advantages (which are linked to the characteristics of audiocassettes) with regard to the comprehension and acceptance of audio taped instructions (Doak, Doak & Root, 1996: 136). All of these advantages are applicable to CDs as well:

- Listeners respond to the dynamics of spoken language referring to the emotional and dramatic characteristics of speech
- People with low literacy skills can understand words and concepts at higher rates for speech than they can read in text
- Decoding spoken words may be simpler than decoding written text
- Common words are used more often in speech than in text
- Speech especially natural and unprepared (i.e. not from a formal written text) carries more redundancy than text, offering alternative opportunities and cues to understand a message.
- A person can listen to audiocassettes/CDs while doing other things (Power, 1999). This provides for a hands-free situation, which can be very useful and less time-consuming than, for example, reading. An example of such a situation is to listen to an audio message while driving (AMC Cancer Research Center, 1994). This tool has been effectively used to communicate for example HIV/AIDS information to truck-drivers (Population Media Center Ethiopia & Save the Children USA, 2004). The concept is also very effective where the hands and eyes are free for practical activity as part of an instructional message (World Bank Institute, 2006).
- Easy operation of the technology. Throughout the literature, the ease to use and operate audiocassette technology is mentioned (Adhikarya & Colle, 1983; Doak, Doak & Root, 1996; Power, 1999; Urgoiti, 1991; World Bank Institute,



2006). In many instances, people are familiar with audiocassette technology, and so it not necessary to teach them how to use it. This is also true for CDs.

- High user control. Audiocassettes/CDs provide the listener with a high degree of control. Firstly, the user can listen to it whenever is convenient and wherever they prefer (Power, 1999). This also overcomes the restrictions of the set time-slots of broadcast media (Power, 1999). Secondly, the user can listen and re-listen as many times as needed.
- The use of audiocassettes/CDs may also have a cost advantage. The production costs to produce an audiocassette with development messages, may be less when compared to producing a video or film on the same topic (Power, 1999). The duplication costs are relatively cheap, and audiocassette/CD players are much less expensive than other media players: televisions, video/DVD players, and computers. Although a complete feasibility study and cost analysis must be done to compare audiocassette and CD production and duplication costs with that of brochures; reference has been made to the effect that the costs of audiocassettes are comparable to that of colour brochures (Doak, Doak & Root, 1996).
- It is widespread (Power, 1999). Taking into account that in South Africa radios are "the most prevalent household item" according to Census 2001 (Statistics South Africa, 2003: 154) with "73% of households possessing a radio in working order." Most radios include a tape deck or CD player.
- Not bound to electricity although audiocassettes/CDs do use electricity to operate, alternative power sources can also be used. Batteries are the best-known and used alternative. There are however, other sources of power, for example solar power and even car or motorcycle batteries are suggested by Adhikarya & Colle (1983). Hand-wind radios are also becoming of use, for example Lifeline radios of the *Freeplay Foundation*



(www.freeplayfoundation.org) and if such an audiocassette/CD player could be developed, it would also overcome the dependency on electricity and batteries.

2.4.2.1.3 Disadvantages of audiocassettes/CDs

The following can be regarded as disadvantages to the use of audiocassettes/CDs:

- Dependency on technology
 - One needs a player in order to listen to audiocassettes/CDs. This technological device needs an energy source, which makes it bound to electricity. Even though this can be overcome by the use of batteries, batteries can be expensive to buy.

Limited feedback

Although audiocassettes/CDs can be used within an interactive context like a workgroup, or as an interactive medium where parties can record their views etc.; audiocassettes/CDs are inherently a one-way communication medium. Feedback is delayed and limited as with other mass communication media.

Inaccessible to the hearing disabled

 Audiocassettes/CDs are inaccessible to the deaf or hearing disabled, because you need to listen to the message.

The cost factor

 Even though audiocassette/CD production and duplication costs are less expensive than for example video production. The cost to develop good quality audiocassettes/CDs may be a factor.



Audiocassettes/CDs, as any other communication medium, have distinct advantages and disadvantages, which make them suitable and/or appropriate in different circumstances. In the following section various examples are provided where audiocassettes have been used to provide information in different contexts.

2.4.2.1.4 Uses of audiocassettes/CDs as communication medium

There are various ways and contexts in which audiocassettes have been used to communicate health and development information, for example in agricultural extension work (Adhikarya & Colle, 1983) and health communication (Collumbien & Douthwaite, 2003; Collumbien, Douthwaite & Khan, 1999; Urgoiti, 1991). The following are some examples where audiocassettes have been effectively used as communication medium.

Within the context of illiteracy or poor literacy

Audiocassettes have been used in, and are suggested for use in, situations where the target audience is illiterate or semi-literate (Adhikarya & Colle, 1983; AMC Cancer Research Center, 1994; Banerjee, 1977; Collumbien & Douthwaite, 2003; Collumbien, Douthwaite & Khan, 1999; Doak, Doak & Root, 1996; Urgoiti, 1991).

Guy (1994: 26-27) states, "electronically recorded sound can be created by the illiterate, can be communicated to the illiterate, is immediately accessible to the illiterate, individually and communally, using technology already in existence."

An example where the use of audiocassettes overcame the barrier of illiteracy is the KEY Social Marketing Project (KSM) in Pakistan. In this project, audiocassettes were used with success in the promotion of family planning. The KEY cassette had a positive impact on the uptake of contraceptives and offered



an innovative medium to disseminate health information in a country where at the time of writing, less than a quarter of women were literate (Collumbien, Douthwaite & Khan, 1999; Collumbien & Douthwaite, 2003).

Within the context of visual disability

Audiocassettes have been used with great success to overcome the barriers of visual disability and to communicate information to the blind and visually disabled (AMC Cancer Research Center, 1994; Marsland, Leoussi & Norcross, 1994). A familiar example would be audio books, where not only fiction but also non-fiction material is recorded onto audiocassette.

Marsland, Leoussi & Norcross (1994:29) discuss the use of audiocassettes by visually impaired people in Britain and emphasise the importance for the visually impaired to "keep abreast of news and current affairs." They report on a survey done by Talking Newspapers (UK), a voluntary organisation, which provides audiocassettes of newspapers and magazines to the visually impaired. Their findings indicated that audiocassettes are "extensively and effectively used by the blind to answer their need for news," and that audiocassettes "play an indispensable role in the lives of blind people". In South Africa, *Tape Aids for the Blind*, is an organisation who provide access to information on audiocassettes for the blind and visually impaired.

In broaching sensitive topics – group work / facilitating discussion

Reference has been made to the effective use of audiocassettes messages to overcome communication difficulties arising from sensitive subjects (Bradley et al, 1999; Collumbien, Douthwaite & Khan, 1999; Collumbien & Douthwaite, 2003; Murthy, 2005). It facilitates the broaching of sensitive issues and, in many ways, can open communication channels. The following projects provide examples:



- In India, the company Vikalpdesign works in the field of social communication. They produce audiocassettes with short audio dramas covering different topics like teenage pregnancy, contraception, and unsafe abortions. The audiocassettes work well, firstly because everyone finds the audio dramas interesting, and secondly, they are very effective as part of group work and aids in broaching sensitive topics, as the health educator refers to the characters in the story to explain sensitive issues. It is also used to initiate group discussions (Murthy, 2005).
- Bradley et al (1999) discuss the interesting use of audiocassettes as part of an education program and risk assessment for teenagers on sexually transmitted diseases (STDs). The results of the study indicated that there was an increase in the amount of discussions on sexuality, and related issues, between the teenagers who were exposed to the intervention material, and their paediatricians. The intervention material, existing of an audio taped risk assessment and education program and brochures, broached the sensitive topic of sexuality and "had a positive impact on adolescent-reported discussion with the physician about sex," (Bradley et al, 1999: 113).

As part of edutainment and/or entertainment

The use of edutainment to inform and educate general public is a concept that is being used increasingly. Combining the inherent characteristics of entertainment with educational messages makes it a very attractive learning tool. This is referred to as 'entertainment-education' or 'edutainment.' "Entertainment-education is the process of purposively designing and implementing a media message both to entertain and educate, in order to increase audience member's knowledge about an educational issue, create favourable attitudes, and change overt behaviour," (Singhal & Rogers, cited in UNFPA, 2002).

University of Pretoria etd - Claasen-Veldsman, MM (2007)



When designing communication messages, it is important to keep in mind that, "the public enjoys entertainment," (Yoder, Hornik & Chirwa, 1996: 188). Brown, Kiruswa & Fraser (2003) discuss the use of an edutainment approach with specific reference to soap operas and HIV/AIDS prevention. They give examples of effective programmes including the Tanzanian soap opera *Maisha* and the successful South African media campaign *Soul City*. They conclude that the "entertainment media can be an effective means for motivating people to adopt beneficial health practices," (Brown, Kiruswa & Fraser, 2003: 105).

The inherent characteristics of audio media, lend themselves to the edutainment approach. Aural stimulation activates the imagination of the listener and holds attention. By repackaging information in dramatic form and incorporating elements of entertainment like role-play, music and the use of sound effects, it is possible to incorporate audiocassettes/CDs as part of what Yoder, Hornik & Chirwa, (1996) identify as "entertainment-based health communication."

The following examples indicate the potential for the use of audiocassettes/CDs as part of an edutainment approach:

The *Maleda (Dawn) project* in Ethiopia consisted of HIV/AIDS awareness dramas that were recorded on audiocassettes and distributed. This project was initially created for, and aimed at the mobile populations; for example, truck drivers along the Ethio-Djibouti corridors in Ethiopia. However, distribution of the audiocassettes spread further than the initial intended target audience. It became so popular that listeners requested a continuous distribution of Maleda and even to produce Maleda films or video. They also requested a new, similar project, which would involve all members, to be made available on audiocassettes, radio, and television (Population Media Center – Ethiopia & Save the Children USA, 2004)



- In a similar project in Vietnam, audiocassettes with popular music and short, trucker-related dramas between songs were distributed as part of an HIV/AIDS awareness campaign called *The National Highway One* Project in Vietnam (The Synergy Project, n.d.)
- Audiocassettes on HIV/AIDS for use by mobile populations, for example truck drivers in Sub-Saharan Africa, were also suggested by the International Organization for Migration (IOM) and UNAIDS (UNAIDS & IOM, 2003).
- Although strictly speaking not an information source, an interesting project is that of the music CD entitled We Shall Survive: A Music for Life Project (Soul Beat Africa, 2005) in which various Ethiopian artists support the fight against HIV/AIDS. The scientifically, pre-tested lyrics revolve around various themes on HIV/AIDS: advice to delay sexual activity; be faithful to one partner; practice safe sex; to avoid stigmatizing and discriminating against people infected with or affected by HIV/AIDS, and to join and win the battle against HIV/AIDS.

As part of a self-help approach

Audiocassettes/CDs may be used as a stand-alone method or as part of a larger campaign to assist individuals in self-help approaches. The scope of topics for this kind of recorded message is vast. As an example, audiocassettes were used as a self-help instrument in a campaign on overcoming depression. The particular pilot study suggested that, "the 'Coping with Depression' audio cassette may be useful and acceptable to patients in primary care," (Blenkiron, 2001: 369).



As part of education & distance education

Audiocassettes are not only used as instructional media in a classroom and learning setup (Heinich, Molenda, Russell & Smaldino, 2002; Newby, Stepich, Lehman & Russell, 2000), but also in distance education (Power, 1999).

As part of public education & social marketing

Connell, Goldberg & Folta (2001: 33) report on a study in which in-store audio public service announcements (PSAs), which are pre-recorded audio messages, and take-home audiocassettes were used to increase fruit and vegetable consumption and improve knowledge and attitudes about fresh produce among shoppers. The results of the study indicate that among the intervention group "there was a significant increase in knowledge about the facts presented on the audiotapes and a significant increase in self-reported fruit and vegetable intake compared with the control group," (Connell, Goldberg & Folta, 2001: 40). They also clearly acknowledge the potential of audiocassette use in their statement: "The potential value of audiotapes that are fun to listen to and that provide actionable information deserves further exploration," (Connell, Goldberg & Folta, 2001: 41).

The projects listed above are only a few examples of the application and use of audiocassettes/CDs as communication media. The way these audio messages were made available to the users differed from project to project; which leads to the next section, in which the different possibilities to make recorded audio messages available to the public will be discussed.



2.4.2.1.5 Making recorded audio messages available to the public

There are various ways and means to make recorded audio messages available for use by the general public. The distribution method will depend upon who developed the audiocassette product(s), the specific context, and purpose for which it was developed (with reference to mass distribution or a limited reach).

Adhikarya & Colle (1983: 22-23) discuss the following listening contexts, which can be a guide to the distribution method needed:

Group listening

- Unstructured setting an informal, unstructured listening situation; for example, in a taxi or public transport, where a group of people listens to a recorded message
- Structured setting a formally structured listening event; for example, where audiocassettes/CDs are used as part of a workshop or women's forum.

Individual listening

- □ Unstructured setting informal, individual use of an audiocassette/CD; for example, private use at home or listening while driving in a car or truck
- Structured setting individual listening in a more formal set up; for example, a listening station in a clinic or library.

Interesting distribution methods include the following:

- Combining the distribution of audiocassettes/CDs with commercial channels for example beverage suppliers (Adhikarya & Colle, 1983). This is especially useful to reach more rural areas.
- Combining audiocassettes/CDs with a specific product. For example, the KEY Social Marketing project (KSM) in Pakistan where the KEY cassette was not only paired with hormonal contraceptives, but also even sold separate at a nominal fee (Collumbien, Douthwaite & Khan, 1999).



2.4.2.1.6 Guidelines to create recorded audio messages

Although it is not the purpose of this study to investigate and establish guidelines on the creation of effective recorded audio messages (in the form of an audiocassette/CD), for use in health and development communication, it is appropriate to mention some of the recommendations and guidelines available. Power (1999) offers suggestions on the design of audiocassettes to be used as part of distance education. Freysen et al (1989) and Heinich, Molenda, Russell & Smaldino (2002) also provide guidelines with regard to the planning and production of audio programmes for use in education. Hartley (1988) applies principles of text design to improve the effectiveness of audiocassettes. Finally, Doak, Doak & Root (1996) provide useful guidelines and learning principles to keep in mind when developing an audiocassette, especially in the context of health communication and when working with low literate patients.

2.5 Summary

In this chapter, the human as information being was discussed. Various factors influence and determine the way humans process information. It is important that these differences be acknowledged, as it will influence how people access and attach meaning to various communication messages. This plays an important role in development, where much needed information is communicated through a variety of methods, for example through awareness campaigns.

In order to understand messages, people first need access to the physical medium containing the information. In this chapter, the important role of the communication medium was highlighted. Not only do people need access to the physical medium, but also to the content of the message. These processes were discussed as physical and semantic access.

University of Pretoria etd - Claasen-Veldsman, MM (2007)



It was determined that in order to make proper decisions, people need information. People also have the right to accessible information. To make responsible choices for themselves and their families and friends, people need to be informed, especially with regard to their health. Since health information is crucial for the well being of a society, information in inaccessible media formats should be repackaged into more accessible media forms.

Recorded audio media, in the form of audiocassettes/CDs, have been discussed as communication media. Its characteristics, advantages, disadvantages, and examples of applications/uses were discussed.

This study investigates the potential of recorded audio media (audiocassettes/CDs) in South Africa with regard to health communication. For this purpose, the concept of health communication, with specific focus on the communication of HIV/AIDS and related issues in South Africa, will be discussed in the next chapter.



3 - Contextualisation: Health & HIV/AIDS communication

3.1 Introduction

In the previous chapter, the importance of information for development and issues pertaining to its communication were discussed. It was stated that all people need access to timely, relevant and accessible information in order to make informed decisions with regard to various everyday-life situations, including their health. This implies that people need access to information with regard to their health and related issues. According to Naidoo & Wills (2000: 23) "Working for health is to create the following conditions:

- Basic needs of food, drink, shelter and warmth
- Access to information about the factors influencing health
- Skills and confidence to use that information."

Southern Africa and especially South Africa, needs urgently to focus on curbing the spread of HIV/AIDS.

- According to the 2006 Report on the Global AIDS Epidemic: "Southern Africa remains the epicenter of the global HIV epidemic: 32% of people with HIV globally live in this sub region and 34% of AIDS deaths globally occur there," (UNAIDS, 2006: 10)
- "South Africa continues to have the largest number of people living with HIV/AIDS in the world," (Shisana et al, 2005: xix)
- "In South Africa, which in terms of sheer numbers has one of the world's largest HIV epidemics, prevalence of HIV among women attending public antenatal clinics was more than one third (35%) higher in 2005 than it had been in 1999," (UNAIDS, 2006: 6)
- Women are the most affected by HIV/AIDS. As stated in the 2006 Report on the global AIDS epidemic (UNAIDS, 2006: 3), "globally, and in every region, more adult women (15 years and older) than ever before are now living with



HIV." In South Africa, "young women (15-24 years) are four times more likely to be HIV-infected than young men," (UNAIDS, 2006: 11).

In South Africa, the effective provision of information and raising public awareness of issues pertaining to HIV/AIDS is crucial in the fight against the disease. HIV/AIDS is described by Abdool Karim & Abdool Karim (2005: 38) as "the single most important challenge facing us in the twenty-first century," as it will have an impact on all levels and spheres of the South African society, from individuals, families, communities to the economy of the country and the health care sector.

The extent and actuality of the HIV/AIDS situation in South Africa makes it a highly appropriate topic to investigate with regard to the accessibility of the media used in current awareness campaigns.

This chapter will address the situation of the communication of health messages in South Africa, focusing on AIDS. Since brochures are the favoured small media in South Africa for health and HIV/AIDS communication, the advantages and disadvantages of brochures will be explored and compared to that of recorded audio media, in the form of audiocassettes/CDs, as an alternative small medium. This discussion will also refer to the diversity of the South African population and, consequently, refer to the issue of literacy and orality as cultural realities in the South African context.

3.2 Health communication

Health communication generally refers to the communication of information on health issues. It forms an important part of primary health care and the World Health Organisation (WHO, 1998: 8) states that, "health communication is a key strategy to inform the public about health concerns and to maintain important health issues on the public agenda. The use of the mass and multimedia and



other technological innovations to disseminate useful health information to the public, increases awareness of specific aspects of individual and collective health as well as the importance of health in development."

Health communication is not only important to create public awareness of health related issues, but also to establish a level of health literacy in the general public. Zarcadoolas, Pleasant & Greer (2003: 119) define health literacy as "the evolving skills and competencies needed to find, comprehend, evaluate, and use health information and concepts to make educated choices, reduce health risks, and improve quality of life. A health literate person is able to apply health concepts and information to novel situations; and to participate in ongoing public and private dialogues about health, medicine, scientific knowledge, and cultural beliefs. This dialogue, in turn, advances health literacy, individually and collectively." This is emphasised by Pridmore (2001: 10) who states "Health literacy implies that health education not only disseminates information, but also enhances a person's ability to seek and use information and make decisions about health behaviours, and motivates people to take action to improve health."

Access to reliable health information is a prerequisite in order to become health literate. In the light of this study, it is appropriate to ask the following:

- What is the impact of inaccessible health information on the health literacy of people?
- Is there a relationship between health and literacy?

In the report of the National Work Group on Literacy & Health (1998) the relationship between literacy and health is discussed and they found that "improved literacy skills of a population are associated with better health status and higher levels of participation in preventive health behaviours." They refer to various studies that found "subjects with the poorest reading skills had poorer physical and psychological health, as measured with the Sickness Impact Profile, than subjects with better reading skills," and "those with very low literacy skills



had markedly higher health care costs than subjects with more well-developed literacy skills." Acknowledging that the relationship is not causal, various factors can be proposed to explain the link between literacy and health. Two of the possible reasons stated by the National Work Group on Literacy & Health (1998), are a lack of knowledge about illnesses, and that people with low literacy may "fail to understand written information they receive form health care providers, thereby contributing to non-compliance, errors in treatment and poor outcomes." Failing to understand written health education materials may have serious consequences for the health of the people in South Africa, especially in the light of the HIV/AIDS situation where poor compliance to anti-retroviral medication can result in "disastrous consequences, both personally and nationally," (Dowse & Ehlers, 2004: 687). They specifically refer to the challenge South African health workers face in coping with "a large patient population that does not have well-developed reading skills," (Dowse & Ehlers, 2004: 687).

The relationship between health and literacy is also discussed by Pridmore (2001) who states, "There is a long established relationship between access to education, population literacy levels and health status that is valid universally for both developed and developing countries. This relationship is recognized in the Dakar Framework for Action which advocates wider recognition of the vital role that literacy plays in lifelong learning, sustainable livelihoods, good health, active citizenship and the improved quality of life for individuals, communities and societies."

Illiterate people should not be prevented from becoming health literate just because they cannot read or write. Adequate health information must be provided in other accessible formats in order for them to achieve a degree of health literacy. Health literacy is defined by WHO (1998: 10) as "the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and manage good health. Health literacy implies the achievement of a level of knowledge,

University of Pretoria etd – Claasen-Veldsman, MM (2007)



personal skills, and confidence to take action to improve personal and community health by changing personal *lifestyles* and *living conditions*. Thus, health literacy means more than being able to read pamphlets and make appointments. By improving people's access to health information, and their capacity to use it effectively, health literacy is critical to *empowerment*. Health literacy is itself dependent upon more general levels of literacy. Poor literacy can affect people's *health* directly by limiting their personal, social and cultural development, as well as hindering the development of health literacy."

The importance of becoming health literate, links to an important aspect of health communication; namely that of the methods and media used in this regard.

The World Health Organisation (WHO, 1998: 8) explains that, "health communication encompasses several areas including edutainment or entereducation, health journalism, interpersonal communication, media advocacy, organizational communication, risk communication, social communication and social marketing. It can take many forms from mass and multi-media communications to traditional and culture-specific communication such as story telling, puppet shows, and songs. It may take the form of discreet health messages or be incorporated into existing media for communication such as soap operas."

It is important for all people to become health literate. Health literacy is especially necessary in the South African context where HIV/AIDS is a continuous threat to the health and well being of the South African public.

In the next section, HIV/AIDS communication in South Africa will be discussed with a focus on the different media used in this regard.



3.2.1 AIDS communication in South Africa

Health communication, including that of HIV/AIDS and related issues, takes place in many forms in South Africa and according to Parker, Dalrymple & Durden (1998: 12) "every HIV/AIDS intervention needs to be supported by communication activities."

Parker, Dalrymple and Durden (1998) make use of the following diagram to illustrate the processes and different communication methods and media used in health communication, with a specific focus on HIV/AIDS communication:

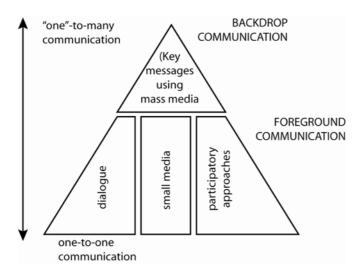


Figure 5: Health communication processes (Adapted from Parker, Dalrymple & Durden, 1998: 13).

In this diagram, the mass media, including broadcast media like the radio and television, "provide information that is awareness oriented... and mainly provide a communication backdrop," (Parker, Dalrymple & Durden, 1998: 12). In some cases, the broadcast, mass media are also referred to as "big media" (Schramm, 1977: 16). Although Schramm (1977) considers "big media" as complex, expensive media, for example, television, and does not view radio as part of the



"big media" category, for the purpose of this study all broadcast media will be considered big media.

Supplementary to the backdrop communication, is what they refer to as "foreground communication" (Parker, Dalrymple & Durden, 1998: 12). This comprises of three parts; dialogue, participatory approaches, and the use of small media.

The following are examples of small media (Parker, Dalrymple & Durden, 1998: 12):

- Print media leaflets, booklets and posters
- Audio media audiotapes and CDs
- Audiovisual media videos and slide-tape shows
- Visual media photographs, displays and slides
- Utility items caps, t-shirts, key rings and stationary items like pens.

Carstens & Snyman (2003) found that the bulk of the small media budget of the national (South African) HIV/AIDS 'Beyond Awareness Campaign' was spent on leaflets. Flowing out of this campaign is the current 'Khomanani' awareness campaign and the printed medium in the form of leaflets or brochures, is still one of the main forms of small media used in HIV/AIDS communication.

In the next section, print media, with specific focus on brochures as a communication medium, will be discussed.

3.3 The use of brochures in development and health communication

Printed communication is widely used for the communication of development and health messages and takes a variety of forms, like newspapers, magazines, brochures, pamphlets, and booklets. The popularity of this medium, especially in the form of brochures, to disseminate development and health information lies in its many overt advantages.



However, the accessibility of this medium is complicated by various factors in the design and production processes of the messages. Various studies provide guidelines on how to enhance the accessibility of the printed medium for low literacy users (Doak, Doak & Root, 1996; Morris & Stilwell, 2003; Snyman, 2002). These guidelines range from the design and layout of the text to the content and wording used in the message. A concept that is of utmost importance and emphasised in almost all of these writings, is that of readability.

"Readability is expressed as the reading ease or difficulty of the materials," (Wells, 1994: 250). Whether used as part of patient education, health campaigns or general developmental messages, the readability levels of printed materials determine its effectiveness.

Studies on the importance of readability, readability tests and related factors have been done by researchers in their own specialised fields with regard to different areas in development communication, health and medicine; for example, occupational therapy (Griffin, McKenna & Tooth, 2003) and HIV/AIDS awareness (Wells, 1994). Readability affects the comprehension of a text. A message is of no value if the content is not understood completely by the user. In their study on the effectiveness of the South African Department of Health's leaflet on HIV/AIDS and Counselling for low literate South Africans, Carstens & Snyman (2003) clearly emphasise that comprehension of the message is one of the main determinants of communicative effectiveness.

It is not the purpose of this study to investigate the processes of readability, but to emphasize that even for the literate, a lack of readability can lead to a misunderstanding of printed material.

If the reading level is too high, it will hamper the reader's comprehension and finally keep them from getting the intended information. This statement is supported by Wells (1994: 250) who says, "at all levels of reading ability, the



greater the readability of text, the more easily it may be comprehended. Thus, readability is not only of interest in reaching the marginally literate, but it is essential in targeting written educational materials to any audience."

Readability provides a general indication of the comprehensibility of materials, but "comprehension will also be influenced by such factors as the reader's literacy, the usefulness of the materials for decision making, and the physical and social context in which the reading occurs," (Doak, Doak & Root cited in Wells, 1994: 250).

In the next section, the advantages as well as the disadvantages of brochures as communication medium will be discussed.

3.3.1 Advantages of brochures

The advantages of brochures are inherently linked to that of the printed medium. It is portable, easily transportable, not dependent on technology and is generally viewed as an authoritative information source. Even though the illiterate can't read it, they tend to trust and value print information (Sturges & Neill, 1998). This is confirmed by Carter (cited in Morris & Stillwell, 2003: 73) who states that in Ghana and Uganda, "almost one-third of the farmers interviewed included printed information in their top five most trusted sources of agricultural information..." It can be taken home, reread, and kept as a reminder. It has a relatively cheap and easy production process and no equipment is necessary to access the content. Printed messages can be accessed by the user as many times as necessary and can be used when convenient (Morris & Stillwell, 2003; Sturges & Neill, 1998).

Although print media is referred to as a good support medium to reinforce what was explained on an interpersonal, oral level (Leach, 1999 a&b); it is often used as a stand-alone communication method. As a result of their findings, Carstens &



Snyman (2003) question the effectiveness of the brochure *HIV/ AIDS and Counselling* of the Department of Health, as a standalone information resource.

3.3.2 Disadvantages of brochures

Although brochures as a communication medium have certain disadvantages or shortcomings, (limited space in terms of the contained message as well as no direct feedback or interaction) it must be taken into account that with regard to the processing of print information, the following limitations or factors impact on all three levels of information processing (as discussed in section 2.2.1). On the physiological level, being blind or having any visual disability will prevent or hinder a person from physically seeing the written message. With reference to the cognitive level, illiteracy is a barrier to access printed information. On the psychological level, an oral culture, or orality, is an example of a cultural or sociological process that impacts on the use and preference of written communication, even though it is not regarded as a barrier to print information.

These concepts, and how they have an impact on the processing of print information, will be discussed in the next section.

3.3.2.1 Visual disability – a physiological barrier to access printed information

One is not always aware of the impact that visual disability has and how many people suffer from it. "The International Eye Foundation (IEF) reports that there are currently about 45 million blind people in the world, the vast majority living in Africa," (UNESCO, 2004). According to (WHO, 2000) "Sub-Saharan Africa accounts for an estimated 5-6 million blind and 16-18 million visually disabled people. Around 60% of them live in 20 English-speaking countries, including Botswana, Eritrea, Ethiopia, Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi,



Mauritius, Namibia, Nigeria, Seychelles, Sierra Leone, South Africa, Swaziland, Uganda, The United Republic of Tanzania, Zambia and Zimbabwe."

McGarry (1991: 144) discusses statistics from the World Health Organisation (WHO) on the causes of blindness and visual disturbances. Up to 200 000 children are blinded yearly due to vitamin deficiency diseases like nutritional blindness which is endemic in India, Indonesia, Haiti, the Philippines and Bangladesh. In Africa, an estimated 20-40 million people suffer from river blindness and up to 500 million people in many countries are blinded by trachoma and similar diseases caused by overcrowding and unsanitary conditions.

In July 1999, the African Union (UNESCO, 2004) formally declared the "African Decade of Disabled Persons (2000-2009)". Is it then not appropriate and necessary to actively investigate the accessibility of development information, especially with regard to health (and HIV / AIDS in particular), to the visually impaired?

According to the report of Statistics South Africa (2005: 5) there are 2,3 million of the South African population of 44,8 million people, who were reported as being disabled. In all the types of disabilities, the highest amount of people were suffering from visual disabilities, totalling to 577 101 people (Statistics South Africa, 2005: 175). The province of Kwa-Zulu Natal had the highest prevalence of people suffering from visual disabilities with a total of 111 126 people and Gauteng was rated second with 91 462 visually disabled people.

It is important that the visually disabled have ready access to health information. Accessible media like audiocassettes/CDs, as part of mainstream health communication and awareness campaigns will reach more of the disabled, as many of the disabled reside in rural areas and so do not have easy access to listeners' libraries and/or other organisations providing for the information needs



of the visually disabled. Many people are not, necessarily, visually disabled or blind, but due to other disabilities and/or conditions, reading a printed text can be cumbersome and difficult.

Another limitation to the easy access of information in print form is that of literacy, or perhaps rather the lack of literacy. As a skill, literacy pertains to the cognitive level of information processing and will be discussed in the next section.

3.3.2.2 Literacy – a marginalising skill?

"In the history of the passage from orality towards literacy, another category was created: illiteracy. The literate world is the world of power and privilege; those excluded from it are the illiterates," (Guy, 1994: 13).

The biggest disadvantage of the print medium is that it is "inextricably bound with literacy skills," (Leach, 1999a: 173). This means that printed media are inaccessible to people with little or no literacy skills and they are, therefore, dependent on others to read for them.

In the current western-based Information Society, literacy can be viewed as a marginalising skill. However, the acquisition of literacy skills is seen as positive. Pretorius (2004: 343) states that, "possibly the most significant impact that literacy has on people's lives is its potential to empower individuals and communities and to 'unsever' the constraints of dependency and marginalisation." Kelder comments, "(L)iteracy is generally associated with an abstract set of reading and writing skills or abilities that exist independently of any context," (Kelder, 1996). Yet, it is also an encapsulating concept, referring to the ability and skills to function within a certain context. There are many different applications of this concept, for example functional literacy, computer literacy, information literacy, visual literacy, and media literacy. In the plethora of literacy

University of Pretoria etd - Claasen-Veldsman, MM (2007)



definitions available in the literature, it is necessary for the purpose of this study, to define and delineate the concept "literacy" as the ability to read and write.

In this sense, literacy is a skill that provides access to printed text by decoding the written code, and, thus, is an enabling skill. On the other hand, being illiterate or even semi-literate can cause a person to be unable to access information contained in printed text. It is important that illiterate and semi-literate people also have access to such information, as established in section 2.2.4 regarding a person's right to access information.

Williams (2001: 432) indicates that with regard to literacy studies, "researchers (often) concentrate on the object (literacy), rather than concentrating on the subject (the 'l' or person) in which the phenomenon of literacy (or illiteracy) occurs. The person is seen as an object on which literacy or illiteracy has an impact, (when) in fact, it should be the other way around…"

Illiteracy can be seen as a barrier that prevents people from effectively accessing information in print form; and literacy can be considered a marginalising factor that prevents people from accessing printed information. Kelder (1996) is of the opinion that literacy, "viewed as an abstract set of decontextualised skills, contributes to the creation of the 'deficit' model in educational and social systems. Individuals and societies are labelled as inadequate because they do not contain enough of a valued product," and that this creates divisions in society.

Illiteracy is often measured in terms of the level of education. According to the 2001 Census in Brief (Statistics South Africa, 2003: 43), the distribution of the population aged 20 years and above by highest level of education completed, is depicted in Figure 6.

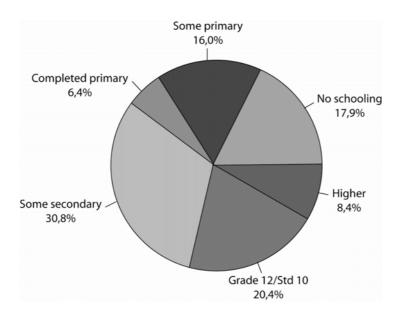


Figure 6 – Distribution of the population aged 20 years and above by highest level of education completed (Statistics South Africa, 2003: 43)

"More than three in ten of those aged 20 and above had started but not completed secondary education. Eighteen percent had no formal schooling," (Statistics South Africa, 2003: 43). If a definition of functional literacy is taken to be a reading ability of Grade 5 and higher, approximately a third of the South African population is functionally illiterate (Carstens, 2004). "The implication is that a third or more of adult South Africans cannot read newspapers, health instructions, agricultural extension materials or directions on a box of cake mix," (Carstens, 2004: 460).

Dowse & Ehlers (2004) state that the literacy problem in South Africa is likely to be underestimated. This is suggested because according to the South Africa Survey 2002/2003 (cited in Dowse & Ehlers, 2004: 687) if a grade 7 school level can be seen as a crude indicator of literacy, an estimated 7.3 million people aged 20 or older can be viewed as functionally illiterate; with the lowest functional literacy of 65,5% occurring in the African population." Since a substantial portion of the South African public can be seen as illiterate or semi-literate, the use of



print-based media can be a marginalizing factor, excluding people from accessing information.

This "map of illiteracy coincides with the maps of poverty, illness, hunger, high infant mortality, low life expectancy, unemployment, environmental destruction, and multiple other inequalities," (Malmquist cited in Fiagby, 1996). McGarry discusses (1991: 151) the impact that poverty has on reading and states that, "as individual income diminishes, so does the possibility of learning to read and write. Where the basic human needs such as food, clothing, and shelter are inadequate it is not unusual that learning to read will rank as a low priority. Reading involves time and energy and these are needed in the daily struggle for survival."

In her book "Community Health Needs in South Africa," Torkington (2000) discusses the health information needs, and accessibility of health information, in South Africa. She states that "in rural areas, for example, many women are illiterate and even those who can read have no access to newspapers or leaflets about the virus and its transmission. As a result there are a lot of myths and beliefs that the disease can be cured," (Torkington, 2000: 85).

According to Wells (1994: 250) "in many countries the population of persons infected with HIV and at risk of infection, often falls increasingly among the economically disadvantaged." It is then also among these groups that "reading difficulty will be the greatest, educational attainment is low, dropping out of formal education is common and reading is practiced less," (Doak, Doak & Root cited in Wells, 1994: 250).

Tied to the concept illiteracy, is that of reading proficiency. Sisulu (2004) states, "South Africa has at least 3 million adults who are completely illiterate – unable to read the instructions on a medicine bottle." An estimated "5-8 million is functionally illiterate – unable to function adequately in the modern world due to under-developed reading and writing skills." She also mentions that there are



"tens of millions of South Africans who are aliterate – able to read but who don't read." Carstens & Snyman (2003) refer to statistics from a large-scale survey in 1996 that was undertaken for READ that point to a low reading proficiency in South Africa.

They conclude that these statistics, "although not empirically uncontested, suggest a disturbing picture of the reading proficiency of the average visitor to state health facilities," (Carstens & Snyman, 2003: 120). A reason suggested by Parker, Dalrymple & Durden (cited in Carstens & Snyman, 2003: 120) for this low reading proficiency, is that "the majority of South African languages emerges from an oral rather than a written tradition, and as a result tends to be fairly cumbersome to read."

A discussion of the concepts of orality and literacy are appropriate when discussing oral and written modes of communication. Both are complex in nature and impact on the processing of information. Where literacy as a skill has an impact on the accessibility of information, orality is linked to the influence that culture has on the communication of information. Orality, as a concept, will be discussed in the next section.

3.3.2.3 Orality – a cultural and sociological process

With reference to section 2.2.1, it was stated that culture plays a role in the psychological level of information processing. This is confirmed by Qakisa (2003: 58) who states that "different societies process information differently." She specifically refers to African cultures, where information is processed through a social process. In these cultures, channels of communication are predominantly auditory and tactile rather than visual and literate (Qakisa, 2003). Schutte (2003: 28) states "Afrocentric cultures can be characterised as collective cultures which



emphasise interpersonal and oral communication where stories, dramas, riddles and proverbs play an important role in everyday conversation."

The concept of orality and the oral tradition is well presented in literature. It is not the purpose of this study to investigate orality in depth, but it is important to acknowledge the existence of orality and the oral tradition in South Africa. According to Brown (1999: 9) "Southern Africa is characterised by complex intersections of orality and literacy..." and that, "oral forms have been an important means of social articulation throughout the history of South Africa, and still continue to adapt to new contexts," (Brown, 1999: 1). Kaschula (1993: xi) focuses our attention on the fact that, "today, oral poetry, song, dance, and drama, are often combined in the production of contemporary and popular art forms as new developments in the production of African oral literature." These developments are exciting as they hold the potential to integrate and use oral forms in other contexts, as was demonstrated by song and praise poetry being used successfully as educational tools in Uganda's fight against AIDS (Kaschula, 1993: xii).

The concept of using praise poetry, as an instrument of the oral tradition, to facilitate change and reinforce acceptable behaviour, is also discussed by Coullie (cited in Brown, 1999: 68). She states that, "praises still often serve as a non-confrontational means of regulating behaviour, not only for the subject of the poem but for the entire community (encouraging behaviours that are praised, discouraging those that are censured)." This function is important, for the prosenarrative folk tales (*izinganekwane* in Zulu and *iintsomi* in Xhosa) which similarly serve to direct behaviour and value systems are generally aimed at children, whereas *izibongo* (praise poems) are principally for adults. The cultural aspects of orality are discussed by Kaschula (2001) who explains the meaning and impact it has on specific cultures as a means of traditional information transfer and education. The "*imbongi*" or oral poet also uses oral, literary performances as acts of communication and convey through the "subtle use of language a



critical message from the performer to the audience," (Kaschula, 2001: xiii). Finnegan (cited in Kaschula, 2001: xiii) points out that, "songs are accepted by African political parties as a vehicle for communication, propaganda, political pressure, and political education, thus a powerful and flexible weapon in many types of political activity."

Ong (cited in Brown, 1998: 167) refers to the interesting concept of "secondary orality" which refers to an oral culture established through the use of electronic media, for example, television, radio and cassette recordings. Guy (1994: 26) adds to this discussion by stating:

"(m)oreover to make use of the technology of secondary orality, no special skills are required beyond that of speech itself. Furthermore, the manner in which some features of this technology has been produced and marketed has meant that they are widely available, with transistor radios in the poorest of homes and pirated tapes playing at dances and drinking sessions even in the most remote rural areas of Southern Africa. As a result, the process by which sound is recorded electronically is familiar and the tape recorder holds few fears for the illiterate, and the principles and objectives of sound recording are quickly grasped."

Acknowledging the oral tradition and oral culture and to apply it to the way information is communicated in South Africa, may also be a way to make information more accessible on a cultural level.

In the next section, the reasons for suggesting audiocassettes/CDs, as alternative to brochures, will be discussed.

3.4 Brochures and audiocassettes/CDs as alternative media?

Oral and written communication are viewed as binary opposites, therefore they can be viewed as direct alternatives (Steinberg, 1995). With regard to the fact



that many forms of print media are often inaccessible to the illiterate and semiliterate (Leach, 1999a&b), it has been suggested in the literature that print-based information be repackaged to oral means of communication (Stilwell, 1999). Audio media are, in essence, an oral medium even though they are mediated. Hearing another person's voice adds a sense of personal communication, linking it with interpersonal information transfer.

The use of recorded audio media is linked to oral communication and can, therefore, be used within a context of orality and the oral tradition. Onwubiko (1999) also recommends audiocassettes as a medium suitable for use in a context of orality and the oral tradition. The use of the recorded audio medium fits into the picture of secondary orality as described in the previous section. Not only is it regarded as a personal medium (the sound of a human voice talking to the listener simulates a personal encounter), it can also incorporate local/traditional music, songs and storytelling as a means of information transfer (which also link with traditional communication media).

Audio information provision can take place in many forms. In communication campaigns, it can be included as both backdrop communication (referring to the broadcast mass media namely radio) and as foreground communication (with reference to the use of small media i.e. recorded audio information in the form of audiocassettes/CDs) (Parker, Dalrymple & Durden, 1998) – see section 3.2.1.

Usually, when propagating the use of audio media as part of the media mix in development campaigns, the use of radio is usually stated as being sufficient. Although radio is an excellent medium to include in the media-mix of any campaign, it cannot be viewed as an alternative to brochures due to the following reasons:

■ Big does not equal (≠) small It has already been established that audiocassettes/CDs are categorised as small media (Parker, Dalrymple & Durden, 1998: 13). Seeing that brochures



and leaflets are also typified as "small media" (Parker, Dalrymple & Durden, 1998: 12), the use of radio as "big medium" is not a suitable alternative (refer to section 3.2.1).

The permanence of radio and recorded audio media differ Radio messages can be compared to the information contained in a newspaper. Both are transient and dynamic media and change from day to day as new information is communicated. The permanence of these media can be seen as low. Although messages can be repeated, it normally is a once-off exposure. Radio messages are also fixed to tight broadcast schedules. Recorded audio messages (audiocassettes/CDs) on the other hand, have a high permanence, because once created, the content is permanent and can be listened and re-listened to according the user's need. Brochures also have a high permanence because once published, the content stays the same and it can be read and re-read as many times as needed.

This study suggests audiocassettes/CDs as an alternative to brochures in the use of health and development campaigns, because of the following reasons:

- Audiocassettes/CDs and brochures are considered "small media"
- The permanence of audiocassettes/CDs and brochures are the same
- The use of audiocassettes/CDs overcome the barriers of literacy
- Audiocassettes/CDs are accessible to the visually impaired

Although the value-added load of brochures and audiocassettes/CDs are more or less the same considering that brochures use text plus graphics and that audiocassettes/CDs make use of text and aural stimuli, recorded audio media have additional advantages over brochures. These advantages include the fact that recorded audio media capture the non-verbal cues of interpersonal communication, adding to the personalised nature of the communication encounter. The use of audiocassettes/CDs also stimulates the imagination and, subsequently, a much more appropriate mental picture can be formed in the



mind of the listener than, for example, through the photo or illustration that was used (refer to section 2.4.2.1.1).

3.5 Summary

This chapter has provided an overview of the concept of health communication and the important role it plays in order for a society to become health literate. Health information must be accessible in order for people to be able to make informed choices regarding their health. Positive and effective behaviour change is the ideal outcome of health campaigns, but without fully accessible health messages, the impact may be limited.

HIV/AIDS is one of the most threatening health issues in South Africa; urgent and innovative intervention is necessary. The barriers of printed brochures may cause the current usage to not be as effective as needed. From the literature study, it is clear that audiocassettes/CDs as recorded audio media, have the potential to be very effective as part of any development or health communication campaign and can also be viewed as an alternative to printed brochures. Audiocassettes/CDs not only overcome the limitations of brochures, but also offer an exciting, new way to deliver health messages – the novelty of the method may also aid in greater interest and usage, people tend to get used to certain forms of communication and after a while do not pay that much attention to it.

In the next chapter, the empirical research process will be discussed. It consists of a detailed discussion on the research design, the process followed including the data collection methods and the process of data analysis.



4 - Research design & methodology

4.1 Introduction

In this chapter, the research process that was followed will be discussed in detail. Firstly the research approach and design will be explained, followed by the research methodology. The following aspects will be discussed as part of the research methodology:

- The selection of the messages, the locations where the research took place, and the research participants
- The data collection methods
- The data analysis as well as the process followed.

The format will consist of a theoretical discussion of the concept and motivation for use; followed by a description of how the processes took place and were applied to the study.

4.2 Research approach

The study is, in essence, explorative as it aims to clarify the ideas of the researcher with regard to accessible health information and to do groundwork for further research (Babbie, 2004; Struwig & Stead, 2001).

Since the purpose of the study is to explore and interpret and not to confirm and validate, as would be the case in quantitative research (Leedy & Ormrod, 2001; Struwig & Stead, 2001), this can be typified as qualitative research. The nature of the research is holistic, context-bound and includes personal views and opinions. The methods of data collection include small samples and informative techniques such as interviewing. Concurrent with qualitative research, the inductive mode of



reasoning is applied and the findings are mainly communicated in literary style and words.

According to Peshkin (as referred to in Leedy & Ormrod, 2005: 134), qualitative research studies typically serve one or more of the following purposes:

- Description to "reveal the nature of certain situations, settings, processes, people," etc. This study describes the use of recorded audio messages within the context of HIV/AIDS communication.
- Interpretation qualitative research enables the researcher to gain new insights and discover the problems that exist within the phenomenon and/or to develop new concepts or theoretical perspectives about a particular phenomenon. In this case, new insights are gained with regard to the potential and use of recorded audio media within HIV/AIDS and health communication, compared to the use of printed brochures. Subsequent problems are also identified; and an interpretative approach is followed with a strong focus on meaning i.e. the interpretation of the meaning of the texts as experienced by the research participants.
- Verification it "allows a researcher to test the validity of certain assumptions..." This study allows the researcher to verify the assumption that recorded audio media, in the form of audiocassettes and CDs, can be an accessible alternative to print brochures for use in HIV/AIDS and health communication
- Evaluation it can "provide a means through which a researcher can judge the effectiveness of particular policies, practices or innovations." In this study, the effectiveness of both print brochures and recorded audio messages are evaluated and, subsequently, compared.

Linked to these purposes of qualitative research, are the following characteristics of qualitative research (Struwig & Stead (2001):

 The perspective of the research participants is important to the researcher in order to determine their understanding of the issues at hand.



- With regard to contextualism, it is important to take into account the social context of the research participants. This "is closely aligned to holism which examines social environments in their totality," (Struwig & Stead, 2001: 12).
- Flexibility with regard to the use of theories a qualitative research allows for a fairly unstructured approach regarding theories and methodologies. In this sense, the researcher may use a variety of methods and, in the words of Leedy & Ormrod (2001: 149), "the specific methods that you use will ultimately be constrained only by the limits of your imagination."

This leads to the next section, in which the research design and methodologies are discussed.

4.3 Research design

The concept 'research design' refers to, the "complete strategy of attack on the central research problem... provides the overall structure for the procedures that the researcher follows," (Leedy & Ormrod, 2001: 91).

This study makes use of a "hybrid design" (Henning, Van Rensburg & Smit, 2004: 39), which is based on the principles of exploratory research (Struwig & Stead, 2001) and a comparative case study (Gorman & Clayton, 2003; Henning, Van Rensburg & Smit, 2004) also called "a multiple or collective case study" (Leedy & Ormrod, 2005: 135).

Although exploratory research is often used as a method of quantitative research, this study makes use of some of its principles, namely that "the researcher investigates a problem about which little is known," (Struwig & Stead, 2001: 7). As far as could be established this is the first investigation on the use of recorded audio messages as an alternative to print based brochures for use in HIV/AIDS and/or health communication. The methods used in exploratory

University of Pretoria etd - Claasen-Veldsman, MM (2007)



research usually include "a study of secondary sources of information," (Struwig & Stead, 2001: 7). This refers to the literature study (Chapters 2 and 3); as well as an analysis of selected cases (Struwig & Stead, 2001: 7), in this study referring to the brochures vs. the recorded audio messages.

Both the audiocassette and brochure evaluation can be considered case studies as they study the effectiveness of the particular media form in terms of selected texts (cases). When two or more cases of equal value and depth are compared and contrasted, it is referred to as "a multi-case or comparative case study" (Gorman & Clayton, 2003: 51). This study can be typified as a multi-case or comparative case study, firstly because the effectiveness of both media forms was compared in separate studies of equal value and depth and secondly, the evaluations of both media took place at four different sites.

The methods used as part of this research design, will be discussed in the next section.

4.4 Research methodology

In this section, the research methodology and process that were followed are discussed. This refers to the evaluation of the recorded audio messages, as well as the methods used in the comparison between the effectiveness of the audio messages and the brochures.

This discussion will start by explaining the selection of the messages and how the recorded audio messages were developed. The selection of the research location and the research participants will be discussed, as well as the methods of data collection and analysis.



4.4.1 Selection & production of the audio messages

The recorded audio messages used in this study, are based on two HIV and AIDS brochures developed by the National Department of Health, as part of the Khomanani project (see section 3.2.1). The titles of these brochures are *Living with HIV and AIDS* and *HIV and AIDS Counselling* (see Appendix A). The texts of these brochures were recorded on audiocassette/CD.

It was decided to use these brochures, because they form part of a national AIDS awareness campaign and were created for the general South African public. Due to the limited scope of the research project, and due to time and resource constraints, only two of the available 13 brochures were used for the evaluation. These specific titles were selected because they are general in nature and do not address sensitive or controversial subjects; for example, sexually transmitted diseases, which may cause embarrassment or discomfort.

The exact content and format of these two brochures was recorded on audiocassettes/CDs by mother-tongue speakers in the same languages as used in the brochures, namely English, Afrikaans, Zulu and Sotho.

The recordings took place in a professional recording studio, ensuring good sound quality. Except for a rhythmic musical sequence as a cue for the introduction and end, and a very faint background beat during the voice-over; there were no other aural cues or sound effects added to the recordings. Slight word order changes were made to the written text of the brochure in order for it to flow better.

Although the recordings were not pre-tested on the target audience, they were played to the research assistants who formed part of the research team. The research assistants consisted of a Master's degree student in Development Communication at the University of Pretoria and 3 other students who worked as



counsellors at the Centre for the Study of AIDS at the University of Pretoria. The topic of HIV/AIDS was, thus, familiar to them and they had experience working with people. The research assistants agreed that the recordings were clear and easy to understand.

4.4.2 Selection of the research location

It was decided to conduct the research at public health clinics. This selection was made on the basis of purposive and convenience sampling (see section 4.4.3). It was decided to do the testing at public health clinics because it is to those places that the general public goes when in need of medical care, information, and advice on health issues.

Another reason for conducting the research at the clinics is the fact that they are used as distribution points for the brochures developed by the National Department of Health.

It was the assumption of the researchers that the visitors to these public health facilities are representative of the general South African public who make use of public health facilities and who also are the target audience for national health awareness campaigns like Khomanani.

The evaluation of the recorded audio messages and brochures took place between August and November 2003 at four public health clinics in the greater Tshwane metropolitan area of the Gauteng province in South Africa. Only four clinics were selected to accommodate time and cost limits. The following clinics were selected because they are spread across the greater Tshwane metropolitan area and were convenient to visit in terms of travelling distance:

- Skinner Street Clinic, Pretoria
- Stanza Bopape Clinic, Mamelodi



- Laudium Clinic, Laudium
- Shoshanguve Clinic, Shoshanguve

Each clinic kindly accommodated and in many ways assisted the research team. Their cooperation and support of the research are highly appreciated.

4.4.3 Sampling of the research participants

The sampling method used in this study (for both the evaluation of the recorded audio messages and the brochures) can be described as a combination of non-probability methods, namely; purposive, convenience and a volunteer sampling.

According to Leedy & Ormrod (2005), purposeful sampling is often used by qualitative researchers. Purposive sampling is described as the process through which the most appropriate participants are selected in terms of the purpose of the study. The criteria for selection are determined by the researcher (De Vos et al., 2005; Henning, van Rensburg & Smit, 2004). This links to:

- The concept of "desirable participants" (Henning, van Rensburg & Smit, 2004:
 71).
- "Those individuals or objects that will yield the most information about the topic under investigation," (Leedy & Ormrod, 2005: 145).
- "The most suitable people... are selected at the time that they are needed," (Henning, van Rensburg & Smit, 2004: 71).
- "A particular case is chosen because it illustrates some feature or process that is of interest for a particular study," (De Vos et al., 2005: 328).

Patients waiting to see the health professionals were randomly approached according to the guidelines of purposeful random sampling (Struwig & Stead 2001: 124) which involves the random selection of a small sample with the emphasis "on information-rich samples and not on generalising to the broader population." For the audiocassette/CD evaluation, 40 participants (10 at each

University of Pretoria etd - Claasen-Veldsman, MM (2007)



clinic) were selected and for the brochure evaluation, a total of 36 participants. Although the relatively small sample is not representative of the whole general public, these patients do represent the general public and the intended target audience of the particular brochures and suited the needs of the study.

The sampling method used, also contained elements of convenience sampling, which is a sample "chosen purely on the basis of availability. Respondents are selected because they are accessible," (Struwig & Stead, 2001: 111). This type of sampling is used in cases where there are time and resource constraints (Struwig & Stead, 2001) as was the case in this study.

Principles of volunteer sampling (Du Plooy, 1997 & 2001: 115) were also used, in that nobody was forced to participate. People standing in the queue willingly consenting to participate, were viewed as volunteering to take part in the study.

The sampling took place as follows. At the health clinics, people arrive early (some even before the clinic opens) and form a queue. They are each given a number that indicates their position in the line to see the healthcare worker; (thus the earlier one arrives, the quicker one sees the doctor). The research assistants randomly approached these people as they were waiting in the queue to see the doctors and /or health workers. In some instances the healthcare workers or nurses at the clinics also explained to the people what the project entailed. After they were invited to take part in the study and were shortly briefed on the purpose, they could decide whether they wanted to take part or not. People then either agreed to take part, or refused.

The next section provides a detailed discussion on the data collection methods that was used as well as the process followed.



4.4.4 Data collection methods

Interviews are often used in qualitative research, as it allows the researcher to gather rich data from the participants and to explore certain issues, as it allows for further probing if necessary. This study made use of individual and focus group interviews to collect data.

Gorman & Clayton (2003: 125) discuss the advantages of interviews and the motivation for their use as a data collection method. They conclude:

- Interviewing allows for immediate responses to questions.
- Interviewing is a personal way of data collection and links to, for example, the participatory (Mody, 1991) and reader-focused (user-focused) (De Jong & Schellens, 1997) approaches; where it is important to understand the meaning the participants derive from messages and to take them into account within their greater social context.
- Interviewing is appropriate in settings where the literacy skills of participants are open to question. As the effectiveness of the print brochures and associated literacy skills were investigated in this study, it was also decided to use interviewing as a data collection method to gain as much data as possible. Data collection could have been more limited if questionnaires were used
- Interviewing as personal and oral communication may also be appropriate and suitable within the cultural framework of orality.

Both studies made use of individual and focus group interviews, which will be discussed in the following sections.

4.4.4.1 Individual interviews

Individual semi-structured (Leedy & Ormrod, 2001) interviews, also referred to as semi-standardised (Struwig & Stead, 2001) interviews, were used. In this interview type, "pre-determined questions are posed to each participant in a



systematic and consistent manner, but the participants are also given the opportunity to discuss issues beyond the questions' confines," (Struwig & Stead, 2001: 98).

It was decided to make use of this interview type because it ensured consistency, as each interviewee was asked the same set of questions and consequently limiting "inter-interviewer variability," (Du Plooy, 2001: 183). Because the wording and the sequence of the questions were decided in advance and all the questions are asked, responses can be compared between interviews (Gorman & Clayton, 2003: 127). This proved very suitable in terms of the comparative case study approach that was followed. Even though the interview schedule (see section 4.4.4.1.1) provided a predetermined structure and list of questions, there was opportunity for open discussion and further questions from either the interviewee or the interviewer.

4.4.4.1.1 Interview schedule for the audiocassette/CD evaluation

The format and structure of the interview schedule was based on the work of De Jong & Schellens (1997) in which they discuss the concept of reader-focused text evaluation. This concept, also identified by Karen Schriver, refers to the evaluation of a particular text from the user and target audience's perspective in addition to text-focused evaluation (mostly done by the writer) and expert-focused evaluation (an evaluation by professionals with expert knowledge). It is important to consider the target audience when designing communication messages, as the success and effectiveness of the message will be determined by the way it is understood and accepted by the target audience. In this sense, the concept of 'reader-focused text evaluation' can be viewed as 'user-focused text evaluation.' Although the article by De Jong & Schellens (1997) refers to document design and written texts in particular, the principles they used can be applied to all kinds of texts – in this case audio texts. Hartley (1988) has also



applied principles of effective printed text design to the production of instructional audiocassettes.

De Jong & Schellens (1997) view the concepts of usability and effectiveness as a complex set of text features which include comprehension, application, acceptance, appreciation, relevance, and completeness. The importance of these features depends on the purpose of the text. For example, comprehension is important in instructional documents as willingness to read, appreciation and acceptance are important in persuasive documents.

Based on these conditions for effectiveness, the following criteria were used as guiding principles for the evaluation of the recorded audio messages and the comparison with the brochure evaluation:

Comprehension

 Comprehension refers to what the respondents understood from the texts.

Acceptability

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

Accessibility

Accessibility refers to the ease by which the message can be accessed and relates to both physical and semantic access. On the physical level, it refers to the access of the communication medium and, on the abstract level, it refers to the individual factors that determine how the message is decoded (see section 2.4).

The concept 'user-focused text evaluation' can be viewed as focusing on two main aspects, namely the user and the interaction of the user and the text. As stated by De Jong & Schellens (1997: 404), "reader-focused evaluation



concentrates explicitly on the reader-text relationship." The interview schedule was structured accordingly with the socio-demographic questions exploring the user and the other sections exploring the interaction of the users and the texts, with specific reference to the criteria of comprehension, acceptability and accessibility.

The interview schedule (see Appendix B), was divided into the following sections:

Socio-demographic questions:

The first part of the interview schedule consisted of closed-ended questions exploring socio-demographic data in order to compile a profile of the participants. This profile provided insight into the patients using public health clinics.

Evaluation of the texts:

Comprehension:

The comprehension of any text is directly linked to its effectiveness. If the target audience does not understand the intended meaning, it can lead to miscommunication and the purpose of the text can subsequently not be met.

The format of this part of the interview schedule was like an oral comprehension test, as discussed by De Jong & Schellens (1997). In this section, the participants' understanding of the texts was measured by determining their understanding and recall of the particular texts. It is important to state that understanding a message is necessary in order for a person to recall the correct information within the context of a question. As stated by Carstens (2004: 465), "poor recall of a text may also be an indication of poor comprehension, since it is easier to remember things that one understands." Thus, participants' ability to recall the appropriate answers, or to interpret the audio texts and then paraphrase them into their own words, is indicative that they understood the texts. As this was



not regarded as a memory test, the participants could listen to the particular texts more than once if they wanted to.

Determining the acceptability and accessibility of the audio texts: The questions in this part of the interview schedule were mostly openended and aimed to determine the attitudes and feelings of the participants towards the audio messages in general. This type of question allowed the researcher to gain rich data as the interviewees were given the opportunity to voice their personal opinions and answer according to their own experiences.

The interview schedule was developed in consultation with advisors and coresearchers who were part of the NRF study (see section 1.5). It was pre-tested, along with the two audio texts, on the 4 research assistants. They listened to the recordings and thereafter the questions were discussed. They did not identify any problems with the either the recordings or the questions.

4.4.4.1.2 Interview schedule for the brochure evaluation

The interview schedule that was used for the brochure evaluation (Appendix D) was developed separately from the interview schedule that was used in the evaluation of the recorded audio messages.

The interview schedule consisted of the following parts:

- Socio-demographic information
- Evaluation of comprehension
- Evaluation of attractiveness
- Evaluation of acceptability
- Evaluation of persuasion
- Evaluation of completeness.



The next section explains the process that was followed in conducting the individual interviews.

4.4.4.1.3 Conducting the individual interviews

Once recruited, the participants were individually briefed, once more, as to the scope and purpose of the study. Thereafter, an individual semi-structured interview on either the brochures or audio messages was conducted with them in the language of their choice. The interviews were conducted by the research team. They conducted the interviews in Zulu or Sotho, but translated the responses of the participants to English whilst making notes during the interviews.

First, the demographic questions were posed to the participants. Then, participants, depending on which study was being conducted, either listened to the first recording or read the first brochure. Participants could listen to the audio messages more than once if they wanted to; participants were given the option to re-listen if they wanted to. Those participating in the brochure evaluation were given ample time to read it through, they could also keep brochure with them for reference during the interview. The participants were then asked the questions relating to the comprehension of the specific text. This process was repeated for the second text. After having completed the questions on the comprehension of the texts, the rest of the questions were posed to them as stipulated by the interview schedules.

The facilities available at the clinics are not designed to accommodate research work. Challenges were experienced in terms of space and organisation. Offices and consultation rooms were used as interview rooms. At one clinic, examination tables had to be used as tables around which the interviewers and interviewees sat with the audiocassette/CD player on top! This was not always conducive for relaxed conversations. At another clinic, there was only one examination room



available and two interviews had to be conducted at the same time in the same venue. Although the interviewees could listen to the audio messages via headphones, this set-up posed a number of challenges to the interviewers.

After each individual interview a token of appreciation, in the form of refreshments, was offered to each participant. They then returned to the queue to see the healthcare worker.

4.4.4.2 Focus group interviews

According to Elling (1997: 453), "a typical feature of focus groups is the explicit use of group interaction to produce data and insights rather than relying on a traditional question-and-answer format."

The focus group interviews were used to gain more information and insight about the participants' attitudes towards the accessibility and acceptability of the two media. It simultaneously provided a way of validating some of the data collected during the individual semi-structured interviews.

Focus groups can consist of between four to eight participants, "whose participation is voluntary and who are homogenous in some respects," (Struwig & Stead, 2001: 99). With reference to the method of voluntary sampling (see section 4.4.3), the participants can be regarded as homogenous as they are all users of the public health clinics, and also part of the general public who is also the target audience for whom the particular brochures that were used in the study, were designed (see sections 4.4.1 and 4.4.2).



4.4.4.2.1 Conducting the focus group interviews

A focus group interview was conducted at the same four clinics as the individual interviews, but with a separate group of people who were not interviewed individually.

The same sampling techniques as for the individual interviews were used, namely purposive and volunteer sampling (see section 4.4.3). Between five and ten people, mostly females participated in the focus group interviews.

The moderator conducted the interviews in the language of choice of the participants. She used the interview schedules of both the brochure and audiocassette/CD evaluations to compile "a moderator guide" (Du Plooy, 2001: 179) and to identify questions to ask to the group.

In the focus group interviews, the study was again explained. All the participants were given the brochure 'HIV & AIDS Counselling' to read. It was decided only to use one brochure, due to time constraints. This brochure was chosen because it contained more specialised information regarding HIV and related issues than the brochure on 'Living with HIV & AIDS'. After allowing enough time to read through the brochure, the interviewer started to ask questions about the brochure. The questions were mostly general and to start with, the participants were asked what they thought and how they felt about the brochure. These general opinions led to the group discussion. Thereafter, the participants listened to the recorded audio message of the same brochure and the same process was followed. While the moderator conducted the interviews the research assistants took notes. The focus group interviews were recorded and transcribed. They were also translated to English. The setting for the focus group interviews was also not ideal at all the clinics, with the same challenges experienced as for the individual interviews. Refreshments were also offered to the participants as token of appreciation for their time and willingness to take part in the study.



In the next section, the data analysis methods and procedures will be discussed.

4.4.5 Data analysis

In this section the data analysis methods that were used will be discussed. This will be followed by a detailed discussion of the process that was followed to analyse the data.

4.4.5.1 Data analysis methods

A combination of qualitative manifest and latent content analysis were used to analyse the data gathered through the semi-structured individual interviews as well as the focus group interviews. Manifest content analysis is comparable to the surface structure of the text/message and refers to those elements in the text/message that are physically countable. Latent content analysis refers to the interpretive reading of symbolism and the deeper meaning contained in the text/message (Berg, 1998).

The data analysis was done by means of deductive and inductive coding procedures (Berg, 1998). The questions relating to the comprehension of the texts were analysed through a deductive approach, because the original texts of the audiocassettes were used as a set categorical scheme that provided a means for assessing the responses. An inductive approach was followed with regard to the general questions, which aimed to determine the preferences of the interviewees towards the media form and messages, and their attitudes towards the same – immersing oneself in the data in order to identify certain themes.

The coding procedure that was used throughout is similar to that of a grounded theory approach which utilises three methods of coding (De Vos, 1998). Open coding refers to the first and general process of breaking down the data into meaningful categories after a close examining. Axial coding is the set of



procedures whereby the data is reassembled in new ways after open coding by making connections between categories. Selective coding can be seen as the process where core categories are selected and related to other categories. This type of coding is not very different from axial coding, but it takes place at a higher or more abstract level of analysis.

4.4.5.2 Process of data analysis

From both the interview schedules (audiocassette/CD and brochure evaluations), similar and comparable questions were selected in order to make a comparison between the findings. These questions were divided into three categories, relating to the criteria of comprehension, acceptance and accessibility of the communication media. Copies of the raw data sets for the brochure evaluation were obtained and analysed according to the same procedure. The responses to the interview schedules were analysed, question by question, through qualitative manifest and latent content analysis as discussed in the previous section. The process of data analysis was repeated a minimum of two times in order to reduce error.

Even though this is a qualitative study, in order to determine the comprehension of the texts, it was important to evaluate and measure the responses that the interviewees gave against the texts as contained in the brochures and the recorded audio messages. Firstly, the correct answers (according to the text) were identified for each question. The responses of the interviewees were then analysed and, by means of the coding procedures, the appropriate responses could be identified. Berg (1998) describes the counting of textual elements as a method of qualitative content analysis to "identify, organize, index, and retrieve data," (Berg, 1998: 225). The counting of these textual elements can then be employed to make a comparison. In this study, the correct answers and other identified textual elements, for example, the amount of responses not stated in

University of Pretoria etd – Claasen-Veldsman, MM (2007)



the text, were counted and then used to make a comparison between the group that listened to the audio messages and those that read the brochures.

It is important to take into account that the interviewees conceptualised the information they heard/read for themselves and expressed some of the answers in their own words, different from those used in the audio messages or brochures. This was considered when analysing the data and examples of such conceptualisation is given where applicable in the next chapter.

For analysis purposes, only answers that were exactly the same or as close as possible to the texts, were accepted. A different response was taken as based on the participant's own knowledge base and or personal experience and does not indicate comprehension. The prevalence of responses never used or referred to in the text, is indicated where applicable and examples are given at each question.

Eight comparable questions were selected from both interview schedules with regard to the comprehension of the texts. The interview schedule of the brochure evaluation contained other questions that were not used for the purpose of this study (they mainly explored the use of the graphics and photographs). Although valuable in evaluating the effectiveness of the brochures, these questions are not applicable in comparing the written text with the audio messages.

This comparison between the data analysis of the audiocassette/CD and brochure study rendered interesting findings on the comprehension, acceptability and accessibility of the different communication media and is presented in the next chapter.

The transcripts of the focus group interviews were analysed according to the same qualitative content analysis principles as the individual interview schedules.



In the next section, the various aspects that can be viewed as limitations to the study, will be discussed.

4.5 Limitations of the study

The following aspects can be viewed as limitations of this study:

- The audio texts and the interview schedule were pre-tested on the four research assistants. They listened to the recordings and, afterwards, the questions were discussed. No problems with either the recordings or the questions in the interview schedule were identified. This might be seen as a limitation to the study, as the pre-testing was expert-focused and not user-focused (De Jongh & Schellens, 1997).
- Due to the small sample, the findings of this study cannot be generalised to the whole population of South Africa. Although not generalisable, it provides groundwork for further research, which links to the purpose and characteristics of exploratory research (Struwig & Stead, 2001).
- Language posed a great challenge. As most of the interviews were conducted by the research assistants in Zulu or Sotho. They translated the participants' responses to English. It rendered me, as the main researcher, dependent on their notes of the interviews.
- With regard to the audio messages, another limitation of study was the fact that the "value added load" of the brochures and the audiocassettes/CDs were not the same. This refers to the fact that the brochures were full colour, contained design elements structuring the text, as well as visual images in the form of photographs. The audio messages, in comparison, only contained the text as contained in the brochures, and no other value-adding elements. In order to "load" the audiocassette/CD



equally, sound effects, dramatisation, music and other aural elements needed to be added. This was only an investigative and explorative study and further research needs to be done in order to develop an audiocassette/CD with the exact same loading as the brochures, and to then again evaluate them.

Another challenge was the difficulty to determine the previous knowledge of the interviewees. HIV/AIDS is a familiar topic, and it is assumed that many of the participants have already heard about HIV/AIDS and related issues. It was thus difficult to determine whether they answered from what they recalled of the audio message, or if they answered from their own knowledge base. In order to overcome this limitation, a statement or response that was not stated in the text, was taken as based on the participants own knowledge and or experience. It will be interesting to further explore the accessibility of brochures and recorded audio messages regarding a subject or text that is completely unfamiliar to the target audience.

4.6 Summary

This chapter provided a detailed discussion of the research methods and process that was followed in the study. The selection of the particular texts, the research location, and the research participants was discussed. Individual semi-structured interviews were discussed as the primary means of data collection and focus group interviews were conducted as a means of validation. The data analysis method of qualitative content analysis was explained and lastly, the limitations and challenges experienced in the research process were identified.

In the following chapter, the findings will be discussed. Similar and comparable questions identified from both interview schedules, and categorised according to the criteria of comprehension, acceptability and accessibility will be presented.

University of Pretoria etd - Claasen-Veldsman, MM (2007)



A comparison will be made between the responses of the participants who listened to the audio messages and those who read the brochures. This comparison may indicate whether there was a difference between the two media forms with regard to comprehension, accessibility and acceptability.



5 - Findings

5.1 Introduction

In this chapter, the findings of the research will be discussed. This discussion will take place in the following format:

- Firstly, the demographic data will be presented for both the audiocassette/CD and the brochure evaluations.
- Secondly, the findings of the individual interviews will be discussed according to the interview schedule and evaluation criteria as set out in the previous chapter.
- Thirdly, the findings of the focus group interviews will be presented.

In this section, the group who took part in the evaluation of the recorded audio messages (audiocassettes/CDs) will be referred to as Group A, and the group who evaluated the brochures, as Group B. As discussed in section 4.4.3, there were 40 participants in Group A and 36 in Group B.

5.2 Findings of the individual interviews

In this section, the findings of the individual semi-structured interviews will be presented.

5.2.1 Demographic data

In this section, the demographic data will be discussed. Selected aspects will be presented with regard to the evaluation of the recorded audio messages. Where applicable, it will be compared with the demographic data of the brochure evaluation. The presentation of the data, however, will be separate for both studies, as there were two different interview schedules (even though there were similar questions) and thus two data sets.



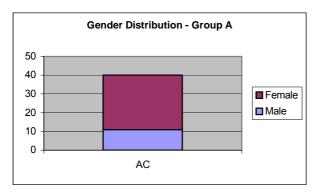
The demographic data will be presented according to the following three categories:

- Individual factors
- Social factors
- Health care

5.2.1.1 Individual factors

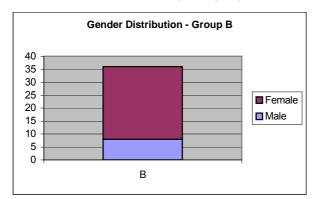
5.2.1.1.1 Gender distribution

The gender distribution of the participants who took part in the evaluation of the recorded audio messages (Group A), is depicted in Graph 1:



Graph 1 – Gender distribution: Audiocassette/CD evaluation

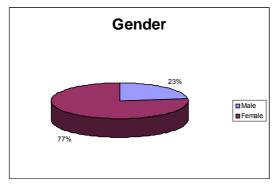
This is comparable to the gender distribution of the participants who took part in the brochure evaluation (Group B), which is depicted in Graph 2:



Graph 2 – Gender distribution: Brochure evaluation



The overall gender distribution is depicted in Graph 3. For both Group A and Group B, the gender distribution of the participants at the four clinics was very similar. Most participants were female. Although the reasons for this were not explored, it may be ascribed to the general role of the female to be responsible for the care of the family.

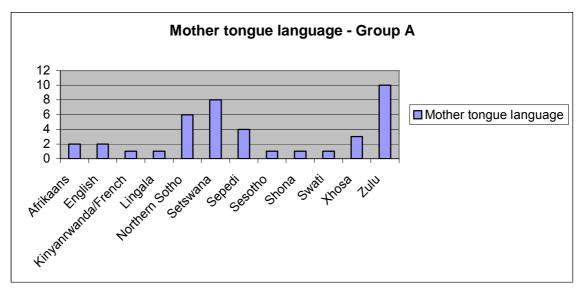


Graph 3 – Gender distribution

5.2.1.1.2 Mother tongue language

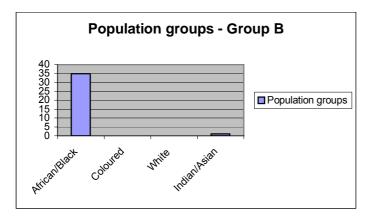
The variety of mother tongue languages of the participants in Group A is presented in Graph 4. From the distribution of the mother tongues of the participants in Group A, it can be deduced that a variety of cultures and language groups were represented in the sample, although the majority of the culture groups are of South African origin. There were also four participants from other African countries. One of them specifically stated "it would be nice if these audiocassettes were also available in French."





Graph 4 – Mother tongue languages: Audiocassette/CD evaluation

The aspect of mother tongue language was not explored in the brochure evaluation. However, the study did distinguish between various population groups. The distribution of the population groups in the brochure evaluation, is presented in Graph 5.



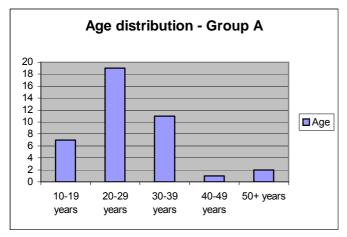
Graph 5 – Population groups: Brochure evaluation

From the distribution of population groups, as presented in Graph 5, it can be deduced that a variety of languages are represented.



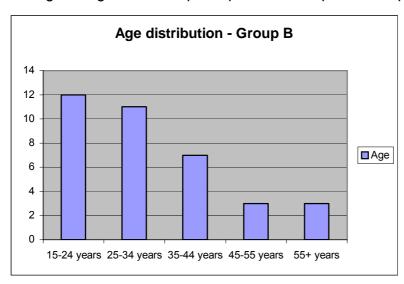
5.2.1.1.3 Age

The age categories of the participants in Group A, are depicted in Graph 6.



Graph 6 – Age categories: Audiocassette/CD evaluation

The age categories of the participants in Group B, are depicted in Graph 7.



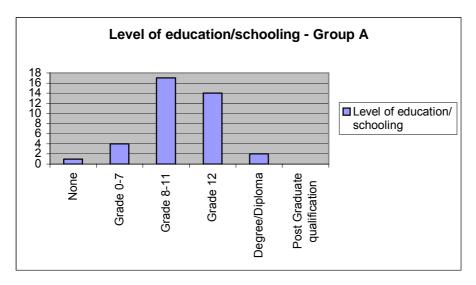
Graph 7– Age categories: Brochure evaluation

The delineation of the age categories differed for the two studies. However, for both, the majority of the participants were distributed in the first three age categories (as depicted in Graphs 6 and 7). Most of the participants were younger adults, the majority of whom were in their twenties and thirties.



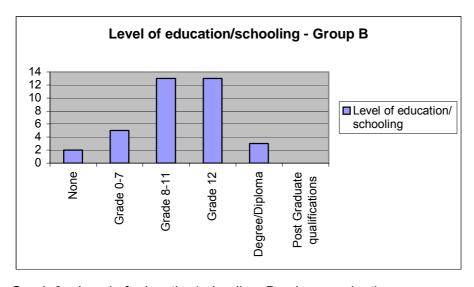
5.2.1.1.4 Level of education/ schooling

The level of education/schooling of the participants in Group A is depicted in Graph 8. The majority of the participants had a secondary school level education.



Graph 8 – Level of education/schooling: Audiocassette/CD evaluation

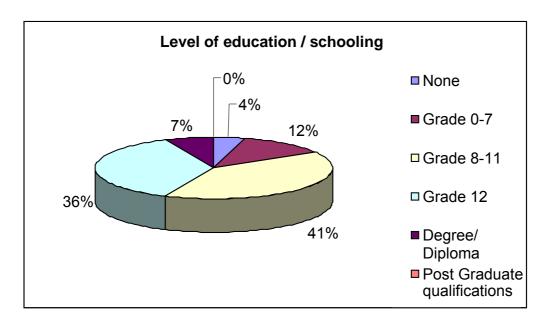
This distribution of level of education/schooling is comparable to that of the participants of Group B, which is depicted in Graph 9.



Graph 9 – Level of education/schooling: Brochure evaluation



The overall distribution of level of education/schooling is depicted in Graph 10. The participants in Group A and B are comparable in terms of education/school level. Most of the participants indicated that they fall into the category of grade 8 to 11, followed by those who have grade 12.



Graph 10 - Level of education/schooling

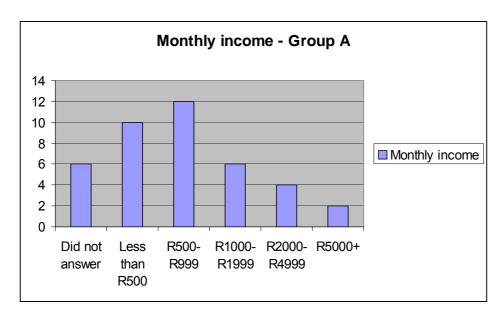
5.2.1.2 Social factors

Monthly income and employment are regarded as social factors, which impact the everyday-lives of people. These two factors were explored:

5.2.1.2.1 Monthly income

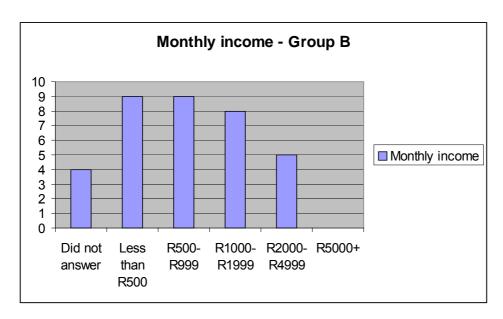
The distribution of monthly income for Group A is depicted in Graph 11.





Graph 11 – Monthly income: Audiocassette/CD evaluation

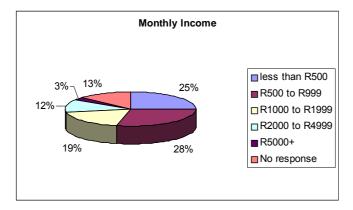
The distribution of monthly income for Group B is depicted in Graph 12.



Graph 12 – Monthly income: Brochure evaluation



The overall distribution of monthly income is depicted in Graph 13.



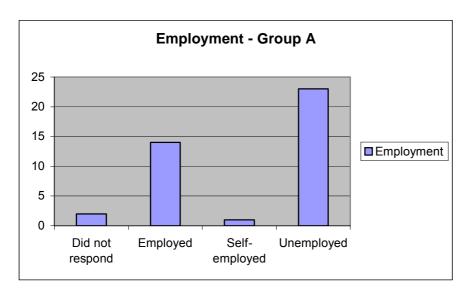
Graph 13 - Monthly income

Both groups are comparable in terms of their monthly income. The highest percentage of participants earns between R500 and R999 per month. This is followed by a monthly income of R500 and lower. The monthly income of the participants can also be an indication of the reason they visit the clinic for health care, as these public health facilities offer free and cheaper health care than private facilities.

5.2.1.2.2 Employment

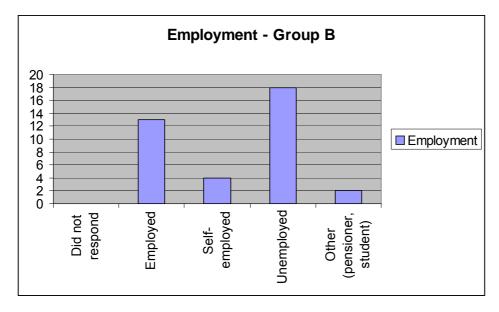
The participants classified themselves into specific categories with regard to employment. The employment distribution of Group A is depicted in Graph 14.





Graph 14 – Employment of the participants of the audiocassette/CD evaluation

The employment distribution of Group B is depicted in Graph 15.



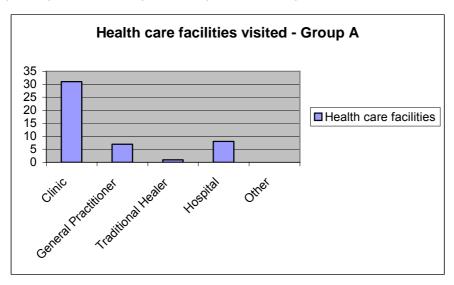
Graph 15 – Employment of the participants of the brochure evaluation

For both Group A and B, it would appear as if more than half of the participants view themselves as being unemployed. This links to their low monthly income and will also impact on their use of healthcare facilities.



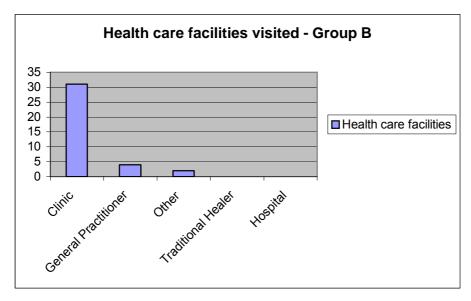
5.2.1.3 Health care

The distribution of healthcare facilitates most often used as indicated by the participants in Group A, is depicted in Graph 16.



Graph 16 – Healthcare facilities visited by participants of the audiocassette/CD evaluation

The distribution of healthcare facilitates most often used as indicated by the participants in Group B, is depicted in Graph 17.

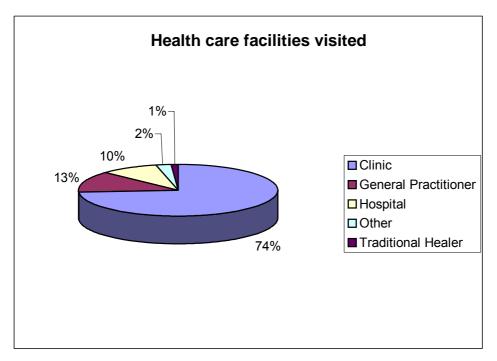


Graph 17 – Healthcare facilities visited by participants of the brochure evaluation



When asked where they go for health care, most of the participants mentioned that they visit clinics. This is also indicative of their economical status.

The distribution of the healthcare facilities as visited by the participants of Group A and Group B, is depicted in Graph 18.

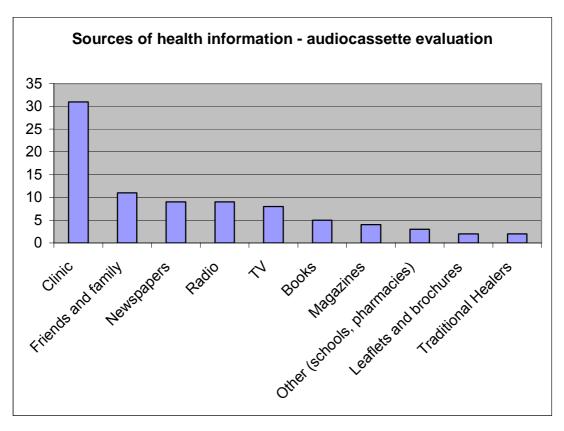


Graph 18 – Healthcare facilities visited by the participants of both the audiocassette/CD and the brochure evaluations

5.2.1.3.1 Sources of health information

The participants in Group A were asked to list their sources of health information. Although initially asked as an open-ended question, a tick-list with various options through which the participants could indicate whether or not they used a particular information source, was also provided. Participants could indicate the use of more than one source. The various sources are depicted in Graph 19. This question was not posed to Group B.





Graph 19 – Sources of health information: Audiocassette/CD evaluation

The clinic is mentioned as the main source of health information, with specific reference to the health workers. The second most used source is family and friends.

5.2.1.4 Summary

In this section, selected demographic data was presented with regard to the participants in the evaluation of the recorded audio media (Group A) and the brochure evaluation (Group B).

- The majority of the participants were females from the African/Black population group.
- Most of the participants indicated a level of secondary school education with most them falling into the categories of grade 8-11 and grade 12. There is a



correlation between the level of schooling and the employment rate; and because of the low employment rate, the overall monthly income of the participants is also very low. The social factors mentioned above probably have an impact on the health care services used by the participants. Since clinics are the highest rated healthcare facility, it is most likely that the participants make use of public health services, which are free of charge (or at a reduced rate) as opposed to private healthcare facilities, which are more expensive.

 Clinics were rated the most used and/or most important source of health information.

These demographic factors provide some context and background on the profile of the sample. This is in line with the National Population Estimates 2006 (Statistics South Africa, 2006) and can be seen as reflecting more or less the 'general public' and the intended target audience of the brochures as developed by the National Department of Health on HIV/AIDS.

In the next section, the findings, with regard to the evaluation criteria, will be discussed.

5.2.2 Evaluation of the texts

The research findings are discussed within the framework of the three criteria used to explore and evaluate the comprehension, acceptability and accessibility of the two media forms (refer to section 4.4.4.1.1).

5.2.2.1 Comprehension

The purpose was to evaluate the comprehension of the messages as contained in the texts.



As discussed in section 4.4.4.1.1, the format of this part of the interview schedule was similar to an oral comprehension test. The following questions, related to comprehension, were used for analysis:

Audio message / Brochure (text) 1 - "Living with HIV and AIDS"

- Question 1 What must a person with HIV do to live a normal life?
- Question 2 What must a person with HIV do to develop a positive attitude in life?
- Question 3 Who can support people with HIV?

Audio message / Brochure (text) 2 - "HIV and AIDS Counselling"

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

In order for the participants to answer the questions appropriately, they were required to have listened to or read the particular messages. In the light that the purpose of the questions was to evaluate comprehension, each response was considered individually, and evaluated accordingly.

In the following section, the findings based on the analysis of each of these questions will be discussed. The findings will be presented as follows:

[A]

A comparison between the responses of the participants in Group A (audiocassette/CD evaluation) and Group B (brochure evaluation) will be made with regard to the particular questions. Examples of the participants' own conceptualisations (see section 4.4.5.2) will be provided.

[B]

A comparison between the recall of the participants in Group A and Group B will be made. This will be followed by a comparison between Group A and Group B regarding the prevalence of responses not mentioned or referred to in the texts.



[C]

A conclusion regarding the findings for each question.

Text 1 – Living with HIV and AIDS

Question 1

- Name the 5 things a person who has HIV can do to live a positive,
 normal life with HIV and AIDS (Audiocassette/CD evaluation)
- What must a person with HIV do to live a normal life? (Brochure evaluation)

There are 5 main points/guidelines mentioned in the text of the audiocassette and brochure that provide an answer to this question. They are:

- "Practice safer sex,"
- "Take care of your health,"
- "Eat healthily to help your body fight diseases,"
- "Have a positive attitude,"
- "Get support."

These 5 points were abstracted and coded from the responses of the participants. Not only those responses that provided verbatim representations of the text were accepted, but also responses where the meaning correlated in general with the specific guidelines presented in the texts.

[A] Comparison between responses for Question 1:

In Table 1, a comparison is presented be made between the responses of the participants in Groups A and B and the applicable answer from the text.



Answer from text with	Responses:	Responses:
<u>examples</u>	Group A	Group B
Practice safer sex	Three quarters (30) of the	Only two participants referred
Example: use condoms	participants referred to	to practicing safe sex.
	practicing safe sex.	
Take care of your health	Two thirds (27) of the	Less than half (15) of the
Example: get exercise, get	participants referred to the fact	participants referred to aspects
treatment when sick, stop	that it is important to take care	regarding health care.
smoking and drink only a little	of your health.	
alcohol		
Eat healthily to help your	With the exception of two (38),	More than half (20) of the
body fight diseases	all of the participants made	participants made reference to
Example: eat fresh fruit and	reference to the importance of	the importance of healthy
vegetables, avoid junk food,	healthy eating.	eating.
drink lots of water		
Have a positive attitude	A third (14) of the participants	Only three participants referred
Example: set goals in life, look	referred to the importance of a	to having a positive attitude.
at the positive side of things	positive attitude.	
Get support	Almost half (18) of the	A quarter (9) of the participants
Example: family, friends,	participants referred to the	referred to the importance of
support groups, counsellors	importance of having support.	having support.

Table 1: Comparison between responses for Question 1

As discussed in section 4.4.5.2, some of the participants conceptualised the content of the texts into their own words. This was considered in the analysis of the data and examples are provided in Table 2:



Response of participant	Concept as stated in the audio text &
	brochure
"Don't take medicine from traditional healers"	Only take medicine given by health workers
Eat well or correctly	Eat healthy
"Don't lose hope"	Look at the positive side of things

Table 2: Examples of own conceptualisations for Question 1

Discussion:

Group A:

The participants could recall more of the first three points (*Practice safer sex, take care of your health* and *eat healthily to help your body fight diseases*) than the last two points (*have a positive attitude* and get support). This might be due to previous knowledge or it may be that they remembered the first points better than the last two. It is also possible that the participants' concentration lowered, or that they became bored while listening. Despite the lower recall of the last two points, their overall recall was good.

Group B:

The recall was surprisingly low, especially of the first three points, namely that of safe sex, taking care of your health and eating healthy. The fact that eating healthy had the highest number of responses may indicate the role existing knowledge played and/or the role played by a photo of healthy food in the brochure. The high prevalence of responses not stated or implied in the text may indicate that the participants did not read the brochures or that they didn't fully understand what they had read.

[B] Comparison for Question 1 between Group A and Group B:

The overall recall of the participants in Group A was higher than that of the participants in Group B. This could be deduced from the following:



[i] Comparison between their recall:

Not only could the group who listened to the audiocassettes/CDs (Group A) recall more of the specific text than those who read the brochures (Group B), but their answers were also more direct and specific. Their responses are summarised and compared in Table 3:

Group A	Group B
None of the participants said that they didn't	One participant said that he/she didn't know.
know	
All of the participants (40) could list at least one	Slightly more than three quarters (29) of the
of the points stated in the text.	participants could list at least one of the points
	stated in the text.
Except for three, all of the participants (37)	Just more than a third (14) of the participants
could recall a minimum of two of the stated	could recall a minimum of two of the stated
points in the text.	points in the text.
Three quarters (30) of the participants referred	Only six of the participants referred to at least
to at least three of the points stated in the text.	three of the points stated in the brochure.
A third (13) of the participants could list four of	One of the participants could list four of the
the stated points	stated points.
Six participants could refer to all five the	None of the participants could refer to all five of
guidelines discussed in the text.	the guidelines discussed in the text.

Table 3: Comparison between the recall of Group A and Group B for Question 1

[ii] Prevalence of responses not mentioned in the text:

The prevalence of responses that were never mentioned in the text was significantly higher in Group B than that of Group A. The fact that these responses were never stated or implied in the text indicates that they answered from their own existing knowledge 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 not stated or referred to in the text is summarised in Table 4:

Group A	Group B	
Four participants made statements or referred	Approximately a third (12) of the participants	
to things that were never mentioned in the	made statements or referred to things that were	
brochure. Examples are:	never mentioned in the brochure. Examples are:	
"Ignore the fact that you are HIV+"	Accept, disclose/ ignore your status	
"Abstain (from sex) to prevent infection"	"Abstain from sex"	
"Personal hygiene is important"	"Behave like a normal person, have friends	
"Eat three meals per day and full meals"	and go to parties"	
	"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"	

Table 4: Comparison between the prevalence of responses not stated in the texts for Question 1

[C] Conclusion – Question 1:

The overall recall of Group A was higher than that of Group B. This can be deduced from the fact that they could recall more of the given text as well as providing more specific and precise answers. The prevalence of statements that were never mentioned in the text was also higher for Group B, indicating that either they didn't read the brochure or they did not effectively understand what they had read. This was interesting given the fact that the brochure also included a couple of colour photos.



Question 2 - What must a person with HIV do to develop a positive attitude in life?

In this question participants were asked to recall the following 4 points as discussed in the text of the audiocassette/CD and brochure:

- "Set goals in life,"
- "Believe in yourself,"
- "Look at the positive side of things,"
- "Know your strengths and weaknesses."

[A] Comparison between responses for Question 2:

In Table 5, a comparison will be made between the responses of the participants in Groups A and B and the applicable answer from the text.

Answer from text with	Responses:	Responses:
<u>examples</u>	Group A	Group B
Set goals in life	Five participants referred to	Two participants referred to
	setting goals in life.	setting goals in life.
Believe in yourself	Only two participants referred to	One of the participants referred
	the fact that it is important to	to the fact that it is important to
	believe in yourself.	believe in yourself.
Look at the positive side of	More than a quarter (13) of the	Five participants made
things	participants made reference to	reference to having a positive
	having a positive outlook in life.	outlook in life.
Know your strengths and	Only three participants stated	None of the participants stated
weaknesses	that is important to know your	that is important to know your
	own strengths and weaknesses.	own strengths and
		weaknesses.

Table 5: Comparison between responses for Question 2



Examples of own conceptualisations as found in the responses of Question 2, are provided in Table 6:

Response by participant	Concept as stated in the audio text &
	brochure
"Must have hope"	Look at the positive side of things.
"Don't lose hope" & "Laugh more"	
"Try to be happy at all times"	

Table 6: Examples of own conceptualisations for Question 2

Discussion:

Group A:

The recall of this question was significantly lower than that of the previous one where all the participants could list at least one of the points stated in the text.

From the responses, it seems that there was a misunderstanding of the concept "developing a positive attitude in life." It seems as if there was confusion regarding the word "positive" – it is used in at least three different contexts in one text, namely being HIV+, to have a positive attitude and the concept "living positively with HIV/AIDS" – a linking sentence added to the audio text to make it flow better.

Almost three quarters of the participants made reference to the main points on how to live a normal life with HIV. This could be due to the statement made on the audiocassette/CD that, the "following 5 main points are guidelines to live positively with HIV and AIDS." It is interesting to note that references to safe sex and eating healthy were very low, with only three references to each, whereas more than a quarter of the participants made reference to taking care of your health. Getting support was listed by almost half of the participants as a way to develop a positive attitude in life, with specific reference to be around people,



friends, and family. This may indicate the importance with which the participants regarded the role that other people play in the determination of one's attitude.

Group B:

The recall of this question was extremely low, with a high prevalence of responses not mentioned in the text. Almost half of the participants made references to other concepts in the brochure. References to "getting support" were the highest and most of them specifically stated being with friends and family.

The poor recall, as well as the many references to things not mentioned in the text, indicates that the participants either didn't read the brochure or that they did not understand what they had read. It seems as if they mainly answered from their own experiences and knowledge.

[B] Comparison between Group A and Group B for Question 2:

The overall recall of the participants in Group A was slightly higher than that of Group B. This could be deduced from the following:

[i] Comparison between their recall:

Group A could recall more of the specific text than Group B. Their responses are summarised and compared in Table 7:

Group A	Group B
None of the participants said that they didn't	None of the participants said that they didn't
know.	know.
Slightly less than half (17) of the participants	Less than a quarter (7) of the participants could
could list at least one of the points stated in the	list at least one of the points stated in the text.
text.	



Six participants could recall two of the stated	One of the participants could recall two of the
points in the text.	stated points in the text.
One participant could mention three of the	None of the participants could mention three of
points stated in the text.	the points stated in the brochure.
None of the participants could list all four of the	None of the participants could list all four of the
stated points.	stated points.

Table 7: Comparison between the recall of Group A and Group B for Question 2

[ii] Prevalence of responses not mentioned in the text:

The prevalence of responses that were not mentioned in the text was almost the same for both groups in that almost half of each mentioned things that were never mentioned in the text. The fact that these responses were not stated or implied in the text, indicate that they answered from their own knowledge and opinions and did not understand what they had read or listened to. It might be that the concept "having a positive attitude" was confusing or not understood completely. This was, unfortunately, not investigated further, and perhaps should be followed up in terms of future communication campaigns.

The prevalence of responses that were not stated or referred to in the text, is summarised in Table 8:

Group A	Group B	
Slightly less than half (18) of the participants	Slightly less than half (15) of the participants	
made references to things that were never	made references to things that were never	
mentioned or referred to in the text. Examples	mentioned or referred to in the brochure.	
are:	Examples are:	
 References to accepting your status - 	Status related –	
"Accept that you've been infected"	"Accepting their status and continue with	
References to the importance of disclosing	their life as if they were not sick",	
your status - "Disclosure is important it	"Try to forget about their sickness",	



- lessens the impact of the disease on people"
- References to personal things -"He must not belittle himself " & "control his emotions"
- References to activities that one can do -"Always keep yourself busy with something";
- "Learn more about HIV so he/she knows how to live with the virus" & "Attend workshops".

- "Tell your family about your problem",
- "Get themselves to understand that AIDS is just a sickness like the flu, so they are like everyone".

Activity related -

- "Keep yourself busy",
- "Go to the gym to take out the stress",
- "Party with your friends",
- "Do things you used to do before you knew about your status".

Table 8: Comparison between the prevalence of responses not stated in the texts for Question 2

[C] Conclusion - Question 2:

Many participants referred to the other guidelines provided in the texts, and both groups showed quite a high prevalence of responses that were not mentioned in the texts. It may be that they didn't understand the question or that the concept "having a positive attitude" was not understood correctly. This also indicates that they answered from their own personal experiences and own knowledge bases.

An interesting observation is that in both groups, a significant reference was made to the concept of "support" within the context of having a positive attitude. This shows the importance of having support and the impact that it has on a person's state of mind. From the many responses, it can be deduced that it is the opinion of the participants, that support, especially from family and friends, is one of the factors determining whether a person would able to cope with the disease through having a positive outlook on life. This concept should be explored further and be kept in mind when designing programmes helping HIV+ people to cope with the disease.



Question 3 – The support of people with HIV

This concept was explored by comparing the responses for the following two similar questions:

- Audiocassette/CD evaluation Who can support a person with HIV?
- Brochure evaluation Name all the people who can support a person with HIV.

[A] Comparison between responses for Question 3:

In this question participants had to recall the following points as stated in the text:

- "Support can come from family, friends, support groups and trained counsellors,"
- "Find out more about services that offer HIV and AIDS support in your area.
 Voluntary Counselling and Testing Sites and AIDS Training, Information and Counselling Centres are in most big towns,"
- "24-hour AIDS Help line."

In Table 9, a comparison will be made between the responses of the participants in Groups A and B and the applicable answer from the text.

Answer from text with	Responses:	Responses:
<u>examples</u>	Group A	Group B
Family	Two-thirds (26) of the	Two-thirds (23) of the
	participants referred to family.	participants referred to family.
Friends	More than half (23) of the	Approximately half (17) of the
	participants referred to friends.	participants referred to friends.
Support groups	Eight participants made	None of the participants
	reference to support groups.	specifically stated support
		groups.



Trained counsellors	Only four participants	Only six participants
	mentioned counsellors as	mentioned counsellors as
	people who can support a	people who can support a
	person with HIV.	person with HIV.
Voluntary Testing sites,	Only three participants referred	Only one participant referred to
Help line & special groups	to Voluntary Testing sites, the	Voluntary Testing sites, the
	help line and special groups that	help line and special groups
	support people with HIV.	that support people with HIV.

Table 9: Comparison between responses for Question 3

Examples of own conceptualisations:

Examples of own conceptualisations as found in the responses of Question 3, are provided in Table 10:

Response by participant	Concept as stated in the audio text &
	brochure
Relatives, parents, partners, care givers	Family
People you live with, colleagues, neighbours,	Friends
boyfriend	

Table 10: Examples of own conceptualisations for Question 3

Discussion:

Group A:

Even though the recall of this question was, on the whole, good; the nature of the question makes it difficult to determine whether the recall was from listening to the audio message, or came from the participants' own knowledge. The nature of the recall can be questioned further because many participants mentioned the people who are close to them, as opposed to other sources of support that are not so well known, like counsellors.



From the responses, it is interesting to note the importance of the support from the community, i.e. the sense of community. Many participants also stated that clinics, hospitals, and healthcare workers could support HIV+ people. This can be due to the fact that these are familiar places where people go for information and treatment regarding their health. It might also be because they know and expect support services and or counselling at the clinics.

Group B:

From the responses, it can be deduced that most of the participants answered from their own knowledge base or experience, and not from reading the brochure. Not one of the participants read the three points as it was stated in the brochure – the participants had the brochures with them when the questions were asked, so they could at any time refer back to the brochure to get the answer.

[B] Comparison between Group A and Group B for Question 3:

[i] Comparison between their recall:

The overall recall of the participants who had listened to the audiocassette was slightly higher than that of the group who had read the brochure. The responses are summarised and compared in Table 11:

Group A	Group B
None of the participants said that they didn't	Two participants said that they didn't know.
know.	
More than three quarters (33) of the participants	Approximately three quarters (26) of the
made reference to at least one of the points	participants made reference to at least one of
stated in the text.	the points stated in the text.
Half (20) of the participants could list at least	Less than half (16) of the participants could list
two people or places that could support people	at least two people that could support people



with HIV.	with HIV.
A quarter (10) of the participants mentioned	Four participants mentioned three of people to
three of the stated people and or places to	support people with HIV.
support people with HIV.	
None of the participants could list all the people	One participant could list all the people or
or places where support can come from.	places where support can come from.

Table 11: Comparison between the recall of Group A and Group B for Question 3

[ii] Prevalence of responses not mentioned in the text:

The prevalence of responses that were not mentioned in the text was higher in Group A than Group B. These responses are summarised in Table 12:

Group A	Group B
Three quarters (30) of the participants	Just more than half (17) of the participants
mentioned places or people that were never	mentioned places or people that were never
stated in the text. These responses can be	stated in the text. These responses can be
grouped as follows:	grouped as follows:
■ Community – including "society",	Community – including "everybody",
"everyone", "teachers" and "people around	"teachers", churches" and "other people
the infected person".	with HIV/AIDS to comfort each other and
■ Health care workers – including "clinics",	give advice".
"hospitals", "doctors", "nurses" and "health	■ Health care workers – including "clinic staff",
professionals".	"doctors", "social workers", "nurses" and
■ The "government" and "the president".	"health professionals".
	The "government" and "volunteers from the
	Department of Health".
	"Traditional healers"
Table 40: Comparison between the provider	"If employed, your employer" "If employed, your employer"

Table 12: Comparison between the prevalence of responses not stated in the texts for Question 3



[C] Conclusion - Question 3:

It is interesting that the question, "Who can support people with HIV?" (as used in the interview schedule for Group A), was interpreted by many participants as "Where can a person with HIV get support?" This was observable in the type of responses given and it was not the case with the Group B whose question read, "Name all the people who can support people with HIV."

Comparing the responses of the two groups, the overall recall of both groups was very much the same, but Group A showed a slightly higher overall recall than Group B. This can be deduced in that more of the participants could recall more of the people listed in the text than that of the group who read the brochure. It is interesting to note that the prevalence of responses not mentioned in the text was higher in Group A than Group B. What is also interesting is the fact that both groups mentioned the same kinds of people or groups they expect should support people with HIV. In both cases, the community was mentioned, where everybody is expected to support people with HIV, and teachers were also specifically mentioned. Health professionals, including doctors, nurses and social workers, were also mentioned.

Text 2 - HIV and AIDS Counselling

Question 4 - What is a counsellor?

In this question participants were asked to explain what a counsellor is.

In the text the following explanation of a counsellor is given:

- "Counsellors are trained to listen, and to give the right information to help people make decisions,"
- "Counsellors give ongoing support, information and advice to HIV-positive people, their partners, friends and family."



In Table 13, a comparison will be made between the responses of the participants in Groups A and B and the applicable answer from the text.

Answer from text with	Responses:	Responses:
<u>examples</u>	Group A	Group B
Person who is trained to	Almost a quarter (9) of the	None of the participants
listen or who listens to	participants specifically stated	specifically stated that
problems	that a counsellor listens to	counsellors listen to people's
	people's problems.	problems.
		Only two participants implied
		that a counsellor listens by
		stating
		"It is a person to whom you
		can explain how you feel,"
		"A person you can share your
		problems with"
A person who gives	With the exception of three, all	Two thirds (24) of the
information, advises, helps	of the participants (37) referred	participants referred to this
to solve problems,	to this helping role of a	helping role of a counsellor.
supports, motivates and	counsellor.	
encourages		

Table 13: Comparison between responses for Question 4

Examples of own conceptualisations as found in the responses of Question 4, are provided in Table 14:

Response by participant	Concept as stated in the audio text &
	brochure
"offers their shoulder when you want to cry,"	"A counsellor should be understanding," and
and "are trustworthy people whom you can	"Counsellors give ongoing support,"
confide in,"	
"the disease,"	"HIV and AIDS,"



"A person who motivates you," "who comforts,"	"A counsellor should be understanding," and
"who encourages,"	"Counsellors give ongoing support,"

Table 14: Examples of own conceptualisations for Question 4

Discussion:

Group A:

The recall of this question was very good. It is interesting to note that almost a third of the participants mentioned that a counsellor is a trained person and almost half of them answered the question within the context of HIV and AIDS as addressed in the audio text.

Group B:

Although the recall was reasonably good, the vagueness and general answers gave the impression that the participants answered from their own knowledge base. The fact that six participants said that they didn't know, indicated that they either didn't read the brochure or that they didn't understand it.

[B] Comparison between Group A and Group B for Question 4:

[i] Comparison between their recall:

Group A could recall more of the specific text than Group B. Their responses are summarised and compared in Table 15:

Group A	Group B
None of the participants said that they didn't	Six participants said that they didn't know.
know.	
With the exception of three participants, all (37)	Three quarters (27) of the participants could
of the other could explain what a counsellor is in	refer to what a counsellor is in general.
general.	
	Only four participants specifically referred to



Almost half of the participants (17) specifically	context of HIV and AIDS as stated in the
referred to the context of HIV/AIDS as stated in	brochure.
the text.	

Table 15: Comparison between the recall of Group A and Group B for Question 4

[ii] Prevalence of responses not mentioned in the text:

The prevalence of responses that were never mentioned in the text was higher for

Group B. These responses are summarised in Table 16:

Group A	Group B
Three participants stated things that were never	Six participants stated things that were never
mentioned in the text. They are:	mentioned or referred to in the brochure. These
"Counsellors are social workers who go	include:
from house to house and help the sick	Counsellors prevent people from committing
people,"	suicide – "Prevents you from being
"A counsellor is a person who helps	suicidal,"
communities,"	"Head of community departments,"
"The right hand man of the chief,"	"An organisation that tells people about
	AIDS,"
	■ "A doctor,"
	"A person like a like a psychologist and
	social worker who helps you solve
	problems,"

Table 16: Comparison between the prevalence of responses not stated in the texts for Question 4



[C] Conclusion - Question 4:

Overall, the recall of the participants who listened to the audiocassette/CD was higher than that of the group who read the brochure. This was deduced from the fact that in Group A, nobody stated that they did not know, compared to Group B, where six participants said they didn't know. The prevalence of answers not stated in the text, was also higher in Group B than for Group A.

The participants in Group A could recall more of the detail of the text with specific reference to the fact that a counsellor is a trained person. They also based their responses much more in the context of HIV and AIDS, as addressed in the text, than the participants in Group B, whose answers were more vague and general and created the impression that they answered from their own existing knowledge.

Question 5 - Why must a person who is HIV+ talk to a counsellor?

The purpose of this question was to test the recall of the following as stated in the text:

"People who are HIV positive may have many feelings like fear, helplessness and anger. They may find it difficult to talk to their friends and family. They also have decisions to make about their lives. Counselling can help HIV+ people."

The nature of this question made it difficult to analyse, because the text is very limited as to the explanation of what a counsellor is. The discussion of the overall purpose of counselling and speaking to a counsellor, as explained in the text, was also accepted as an explanation of what a counsellor is. This was a very open question and was analysed as such.



[A] Comparison between responses for Question 5:

In Table 17, a comparison will be made between the responses of the participants in Groups A and B and the applicable answer from the text.

Answer from text with	Responses:	Responses:
<u>examples</u>	Group A	Group B
Expression and coping with	Five participants stated that an	Only one participant stated that
fear and emotions	HIV+ person must talk to a	an HIV+ person must talk to a
	counsellor because they	counsellor because they
	experience all kinds of emotions	experience all kinds of
	and fears that they need to deal	emotions and fears that they
	with.	need to deal with.
Experience difficulty to talk	Four participants mentioned that	One participant stated that
to family and people close	it might be difficult for people	"because they are scared to
to them	with HIV to talk to people close	talk to the people close to
	to them.	them."
A person with HIV needs	Two thirds (27) of the	Two thirds (24) of the
information; advice; help to	participants focused on the help	participants focused on the
solve problems; support;	a counsellor can give a person	help a counsellor can give a
motivation and	who is HIV+ and the support,	person who is HIV+ and the
encouragement from a	guidance and information they	support, guidance and
counsellor.	can provide.	information they can provide.

Table 17: Comparison between responses for Question 5

Examples of own conceptualisations as found in the responses of Question 5, are provided in Table 18:



Response by participant	Concept as stated in the audio text &
	brochure
Talk to a counsellor "to get his/her spirit	"A counsellor should be understanding,"
uplifted,"	"Counsellors give ongoing support,"

Table 18: Examples of own conceptualisations for Question 5

Discussion:

Group A:

The recall of this question was good with most of the participants able to discuss why a person who is HIV+ must talk to a counsellor. The responses that were not mentioned in the text indicate that those participants answered from their own experience and knowledge. What is perhaps important to note, is the reference that HIV+ people might consider suicide, that there is a stigma attached to HIV and that they experience harassment from the community.

Group B:

Even though the recall was, on the whole, good, most of the participants only referred to the more general reasons for HIV+ people to speak to a counsellor. They didn't answer directly from the text and the prevalence of many of the answers that were not stated in the text shows that those participants answered from their own existing knowledge.

[B] Comparison between Group A and Group B for Question 5:

[i] Comparison between their recall:

Group A could recall more of the specific text than Group B. The responses are summarised and compared in Table 19:



Group A	Group B
One participant said that he didn't know.	Two participants said that they didn't know.
More than three quarters (34) of the participants	Two thirds (24) of the participants could refer to
could explain why a person should talk to a	the general need for talking to a counsellor.
counsellor.	

Table 19: Comparison between the recall of Group A and Group B for Question 5

[ii] Prevalence of responses not mentioned in the text:

The prevalence of responses that were not mentioned in the text was higher for Group B than for Group A. These responses are summarised in the following table:

Group A	Group B
There were eight responses that were not	Almost half (16) of the respondents stated
mentioned in the text. They were:	things that were never mentioned or referred to
Counsellors can prevent suicide	in the brochure. These included:
Counsellors help people to deal with "the	Counsellors prevent people from committing
emotional trauma of being HIV+,"	suicide - "They might kill themselves,"
"So the person can survive the disease,"	Status issues: either to accept it or to share
■ "Because a person start to judge himself,"	it with someone - "Because then your HIV
"It is not necessary, it is according to the	status secret will be safe with him/her even
need of the person,"	though it's out of your chest,"
Because there is a stigma attached to AIDS	 "A person with HIV does not go to a
 it is important for infected people to talk to 	counsellor. He must see a doctor for
counsellors"	confirmation. The doctor will explain
"So that he/she can accept that they have a	everything,"
chronic disease,"	 "Because people reject those people with
"Because people in the community harass	HIV,"
people with HIV,"	

Table 20: Comparison between the prevalence of responses not stated in the texts for Question 5



[C] Conclusion - Question 5:

Overall, the recall of the participants who listened to the audiocassette was slightly higher than that of the group who read the brochure. This can be deduced from the following:

In Group A, only one participant stated that he/she didn't know, whereas in Group B, there were two participants who didn't know. Also, the prevalence of answers not stated in the text, was higher in Group B than for Group A. The participants who listened to the audiocassette could recall more of the specific text with reference to coping with their emotions and the difficulty to talk to people close to them about the disease. Both groups answered this question in very general terms, but the group who listened to the audiocassette had a higher reference to HIV or as they call it, "the disease."

From the responses not stated in the text, the following should be noted: both groups referred to the issue of HIV+ people being suicidal. Status also seemed to be important, whether it is the acceptance or the disclosure thereof.

Question 6 - How should a counsellor behave?

In this question, participants were asked to explain how a counsellor should behave according to what was stated in the text. The following guidelines were given:

"A counsellor:

- Should provide a private place for you to talk;
- Must not tell anyone about your situation;
- Should not judge your situation;
- Should be understanding, and allow you to express your feelings;
- Should advise you of your choices, but not make decisions for you;
- Should give you information that will help you make decisions;
- Should be supportive."



There are also other references that were made in the text, which relate to how a counsellor should behave. These were also accepted:

- "Counsellors are trained to listen, to give the right information to help people make decisions,"
- "Counsellors give ongoing support, information and advice to HIV+ people, their partners, friends and family."

[A] Comparison between responses for Question 6:

In Table 21, a comparison will be made between the responses of the participants in Groups A and B and the applicable answer from the text.

Answer from text with	Responses:	Responses:
<u>examples</u>	Group A	Group B
Confidentiality and privacy	Half (20) of the participants	Only two participants mentioned a
	mentioned that a counsellor should	counsellor should provide a private
	provide a private place to talk and	place to talk and be confidential.
	be confidential.	
Not judgmental	Six participants stated that a	Two participants stated that a
	counsellor should not judge.	counsellor should not judge.
Personal attributes of a	Almost two thirds (24) of the	More than half (20) of the
counsellor: be supportive,	participants focused on the	participants focused on the personal
understanding, allow people to	personal attributes of how a	attributes of how a counsellor should
express their feelings etc.	counsellor should behave.	behave.
Provide advice and	Five participants referred to this	Two participants referred to this role
information. Guide a person,	role of a counsellor.	of a counsellor.
but not make decisions for		
them		
Listen	A quarter (10) of the participants	Five participants mentioned that a
	mentioned that a counsellor should	counsellor should be good listener or
	be good listener or that they should	that they should listen to people's
	listen to people's problems.	problems.

Table 21: Comparison between responses for Question 6



Examples of own conceptualisations as found in the responses of Question 6, are provided in Table 22:

Response by participant	Concept as stated in the audio text &
	brochure
A counsellor should be "be patient, warm and	"A counsellor should be understanding, and
friendly,"	allow you to express your feelings," and "be
	supportive,"

Table 22: Examples of own conceptualisations for Question 6

Discussion:

Group A:

The recall of this question was good with most of the participants able to explain how a counsellor should behave. The responses that were not mentioned in the text indicate that those participants answered from their own experience and or expectations.

Group B:

Overall, the recall for this question was low. Few participants provided answers as given in the text. Most of the participants focused on the personal attributes that are expected of a counsellor. Even though many of these responses tie in with the concepts of being understanding, supportive and approachable, it indicates that the participants spoke from their own expectations and not from what they had read in the brochure. The overall impression from the responses is that most of the participants answered from their own personal expectation of how a counsellor should behave and not from what they had read in the brochure.



[B] Comparison between Group A and Group B for question 6:

[i] Comparison between their recall:

Group A could recall more of the specific text than Group B. The responses are summarised and compared in Table 23:

Group A	Group B
None of the participants said that they didn't	One participant did not answer.
know.	
With the exception of one, all the participants	Three quarters (28) of the participants could list
(39) could list at least one of the categories as	at least one of the categories as mentioned in
mentioned in the text.	the text.
More than half (24) of the participants could	Only four participants could mention two of the
mention two of the categories.	categories.
Only four participants could mention three of the	Only one participant could mention three of the
categories.	categories.
None of the participants could list four of the	None of the participants could list four of the
categories.	categories.
None of the participants could list all the ways a	None of the participants could list all the ways a
counsellor should behave as listed in the text.	counsellor should behave as listed in the text.

Table 23: Comparison between the recall of Group A and Group B for Question 6

[ii] Prevalence of responses not mentioned in the text:

The prevalence of responses that were not mentioned in the text was higher in Group A than in Group B. These responses are summarised in Table 24:



Group A	Group B
Eight participants stated things that were never	Just more than half (19) of the participants
mentioned in the text. They are:	stated things that were never mentioned or
"Counsellors must have a sense of	referred to in the brochure. These include:
humour,"	To have endurance, perseverance or to be
"Must tell the truth," and "truthfulness"	strong
"Must be considerate,"	"Must not be emotionally disturbed or cry,"
"Must be humble,"	Be intelligent or confident
"Must have time to help a person,"	 Must be well-mannered, well behaved,
"Help you to be free to talk to others,"	polite and respectful
	 Have a good personality and speak well
	"Must speak a language the patient can
	understand,"
	"Must not be afraid to touch the HIV+
	person,"
	 "Should be cool and must not show bad
	feelings for the other person,"
	"Must be like a brother or sister,"

Table 24: Comparison between the prevalence of responses not stated in the texts for Question 6

[C] Conclusion - Question 6:

Overall, the recall of the participants who listened to the audiocassette was slightly higher than that of the group who read the brochure. This can be deduced from the following:

In Group A, none of the participants stated that they did not know, whereas in Group B, there was one participant who didn't know.



The prevalence of answers not stated in the text, was higher in Group B than Group A. This is an indication that they answered from their own experience and expectations.

The participants in Group A could recall more of the specific text with reference to confidentiality and privacy, not being judgmental and to give advice but not make decisions for you.

Question 7 - When must a person go for counselling?

This question specifically asked when a person should go for counselling.

Although this can also possibly be seen as an open question, the text specifically explains the following with regard to when a person should go for counselling:

"Anyone having an HIV test should speak to a counsellor before the test. They should discuss their test results afterwards. Counsellors give ongoing support, information and advice to HIV-positive people, their partners, friends and family."

Thus:

The brochure explicitly states: "Anyone having an HIV test should speak to a counsellor before the test. They should discuss their test results afterwards,"

The text also implicitly states the following situations in which a person should go for counselling:

- 1. People dealing with HIV/AIDS (problems, fears, anger etc.) either the infected person or those supporting him/her
- 2. People wanting to gain more information about HIV and AIDS.



Important:

For the purpose of determining the recall of this question, responses that were focused on the context of the text were considered. Vague answers and very general answers were discarded, as they did not indicate that the participants got the information from listening to the audio message or from reading the brochure. These responses could just as well be from the participant's own personal experience or knowledge base.

[A] Comparison between responses for Question 7:

In Table 25, a comparison will be made between the responses of the participants in Groups A and B and the applicable answer from the text.

Answer from text with	Responses:	Responses:
<u>examples</u>	Group A	Group B
Before and after HIV testing	Half (20) of the participants	Almost a quarter (8) of the
/ results	stated that one should go for	participants stated that one
	counselling before and or after	should go for counselling before
	an HIV test.	and or after an HIV test.
Problems dealing with the	A quarter (11) of the participants	Almost a third (11) of the
disease	referred to this situation.	participants referred to this
		situation.

Table 25: Comparison between responses for Question 7

Examples of own conceptualisations as found in the responses of Question 7, are provided in Table 26:



Response by participant	Concept as stated in the audio text &
	brochure
One should go for counselling "before the	Anyone having an HIV test should speak to a
results (of the tests) were made known," and	counsellor before the test. They should discuss
"when you find out about your status."	their test results afterwards.

Table 26: Examples of own conceptualisations for Question 7

Discussion:

Group A:

The recall of this question was reasonably good.

Group B:

Overall, the recall for this question was fairly low. Few participants provided answers as given in the text. Most of them gave general answers, for example; that when a person has problems, they should see a counsellor. Even though many of these responses do correspond with the role and function of a counsellor and might be a good reason to see a counsellor in general, it may be an indication that the participants spoke from their own knowledge and not from what they had read in the brochure.

[B] Comparison between Group A and Group B for Question 7:

[i] Comparison between their recall:

Group A could recall slightly more of the specific text than Group B. The responses are summarised and compared in Table 27:



Group A	Group B
One participant didn't answer.	Two participants said they didn't know.
Almost three quarters (28) of the participants	Half (18) of the participants could refer to at
could refer to at least one of the reasons when	least one of the reasons when a person should
a person should speak to a counsellor.	speak to a counsellor.
Only three participants could mention both of	Only one participant could mention both of the
the stated/implied reasons.	stated/implied reasons.

Table 27: Comparison between the recall of Group A and Group B for Question 7

[ii] Prevalence of responses not mentioned in the text:

The prevalence of responses that were not mentioned in the text was slightly higher in Group A than in Group B. These responses are summarised in Table 28:

Group A	Group B
A quarter (11) of the responses were not	Almost half (16) of the participants gave
mentioned in the text. These can be divided into	responses that were not mentioned in the text.
two categories:	These responses were either too vague and in
	general or specifically stated something that
	was not referred to. The responses can be
	divided into two categories:
	Firstly, some participants interpreted this
Firstly, some participants interpreted this	question literally and thus responded referring
question literally and thus responded referring	specifically to the time when a person can go for
specifically to the time when a person can go for	counselling. These answers either stated the
counselling. These answers either stated the	times one could go, or that a person can decide
times one could go, or that a person can decide	for themselves and when they need to see a
for themselves and when they need to see a	counsellor, and go and see them. Responses
counsellor, and go and see them. Responses	included:
included:	■ "Anytime,"



- "During the week,"
- "Anytime,"
- "Anytime when you have problems, 24 hours."

Secondly, with regard to the disease:

- Suspecting that you are infected "When one suspects something is wrong in the body,"
- "For help with disclosure to friends and family,"
- "Pregnant women because it is the pretesting phase – to save the child's life."

- "From the age of 25,"
- "Not immediately, must first think about it,"
- "At the time/date as prescribed by the clinic,"
- "As often as possible, depending if you've got problems."

Secondly, with regard to coping, many of the answers were very general or they came from the person's own perspective. These include:

- "In their everyday life""When they are stressed and no longer happy,"
- "When they start to get sick," or "when the person realizes they are sick,"
- "When a person is undecided and stressed,"
- "When they feel desperate,"
- "People go to the clinic when they have problems with accommodation or place of residence."

Table 28: Comparison between the prevalence of responses not stated in the texts for Question 7

[C] Conclusion - Question 7:

The formulation of this question may have made it difficult to answer, the word 'when' is often associated with times and in this case, it referred more to the reason for seeing a counsellor. The implied reasons for going to see a counsellor also made it difficult to evaluate the recall but, in order to compare, it was



necessary to keep the answer focused on the text of the brochure and the audiocassette, and not to accept very general responses.

Overall, the recall of the participants who listened to the audiocassette was slightly higher than that of the group who read the brochure. This can be deduced from the following:

In Group A, one of the participants didn't answer, compared to Group B, where two participants stated they didn't know.

The prevalence of answers that were not stated in the text was also slightly higher in Group B than for Group A. Their answers were also more general and vague than that of Group A. This may be an indication that they answered from their own perspective, knowledge, and experience.

The participants who listened to the audiocassette could recall more of the specific text with reference to when a person should go for counselling.

Question 8 - Where can a person go for counselling?

In this question, participants were asked to name where a person can go for counselling. The following facilities are mentioned in the text:

- "There are many organisations that give counselling:
 - Voluntary Counselling and Testing sites
 - AIDS Training, Information and Counselling Centres (ATICCs) in most big towns
 - □ The free 24-hour AIDS Helpline at 0800 012 322
 - Social workers and some community organisations
 - National Association of People with AIDS (NAPWA)."



[A] Comparison between responses for Question 8:

In Table 29, a comparison will be made between the responses of the participants in Groups A and B and the applicable answer from the text.

Answer from text with	Responses:	Responses:
<u>examples</u>	Group A	Group B
Voluntary Counselling and	Seven participants mentioned	One participant mentioned,
Testing centres /	counselling centres and testing	"where they do blood tests."
Counselling services	centres.	Two respondents referred to
		counselling services.
AIDS Training, Information	Four participants mentioned	One participant mentioned
& Counselling centres	ATICCs.	ATICCs.
(ATICCs)		
24-Hour Helpline	Two participants mentioned the	Two participants mentioned the
	helpline.	help line.
Social workers &	A quarter (11) of the participants	Almost a quarter (8) of the
Community organisations	referred to social workers and	participants referred to social
	community organisations.	workers and community
		organisations.
National Association of	Nobody mentioned NAPWA.	One participant mentioned
People with AIDS (NAPWA)		NAPWA.

Table 29: Comparison between responses for Question 8

There are no examples of own conceptualisations for Question 8.

Discussion:

Group A:

The recall of this question was average. Most of the participants mentioned the places that were familiar to them, namely clinics and hospitals. This indicates that they might have answered from their own perspective and not, specifically, from



what they heard on the audiocassette/CD, as these familiar facilities were not explicitly named in the text. The nature and format of the audio message might also be the reason for their poor recall, as these places were merely listed and the long unfamiliar names perhaps made recall difficult.

Group B:

Overall, the recall for this question was fairly low. Few participants could provide the places as listed in the text. As with the audiocassette group, most of them only referred to the familiar places like clinics and hospitals. The fact that the participants who read the brochure could not refer back to their brochure and merely read the answer, indicates that they answered from their own knowledge base and either did not read or did not understand what they were reading.

[B] Comparison between Group A and Group B for Question 8:

[i] Comparison between their recall:

Group A could recall more of the specific text than Group B. The responses are summarised and compared in Table 30:

Group A	Group B
One participant didn't answer.	Two participants said that they didn't know.
Half of the participants (21) could refer to at	A third (13) of the participants could list at least
least one of the places mentioned in the text	one of the categories as mentioned in the text.
where a person can get counselling services.	
Only three participants could mention two of the	Only two participants could mention two
places.	categories.
None of the participants could mention more	None of the participants could mention more
than two of the places were one can get	than two of the places were one can get
counselling.	counselling.

Table 30: Comparison between the recall of Group A and Group B for Question 8



[ii] Prevalence of responses not mentioned in the text:

The prevalence of responses that were not mentioned in the text was approximately the same for both Group A and Group B. These responses are summarised in Table 31:

Group A	Group B
Three quarters (32) of the participants stated	Slightly more than three quarters (30) of the
that a person could go to clinics, hospitals, and	participants stated that a person could go to
or healthcare workers for counselling.	clinics, hospitals, and or healthcare workers for
	counselling.
Other responses that were not part of the text	
include:	Other responses that were not part of the text
"Municipality offices," & "government	include:
organisations,"	■ "The Department of AIDS,"
■ "In the home by family members," & "at	■ "Psychologist,"
home if one of the family members is a	■ "Friends & teachers,"
counsellor,"	"People who don't have the profession of
 "Anytime when you have problems, 24 	counselling, but the capability."
hours."	

Table 31: Comparison between the prevalence of responses not stated in the texts for Question 8

[C] Conclusion - Question 8:

Even though the recall for this question was fairly low for both groups, the overall recall of the respondents who listened to the audiocassette was slightly higher than that of the group who read the brochure. This can be deduced from the following:



In Group A, only one of the respondents didn't answer, whereas in Group B, two participants said they didn't know. The participants in Group A could also recall slightly more of the specific text than those in Group B.

Of both groups, three quarters mentioned clinics, hospitals, and health workers as places where one can get counselling services. This high response rate is very interesting since these places were not explicitly mentioned in the text. It indicates that the participants answered from their own life and knowledge, where these places are familiar. The reason for the low recall of Group A may be due to the way the audio message was constructed and the fact that these places were merely listed. These names are very long and it is difficult to remember all of them in the way they were presented on the audiocassette/CD. The fact that Group B didn't merely reread the places as listed in the text, indicates that they didn't read the brochure or that they didn't understand what they had read.

5.2.2.2 Acceptability

As discussed in Section 4.4.4.1.1, acceptance or acceptability refers to the attitude of the target audience toward the specific medium, e.g. whether they find it credible, relevant, realistic, and reasonable.

The following questions were selected from the two interview schedules and the data was analysed through an inductive coding process.

<u>Audiocassette/CD evaluation:</u>

- How do you feel about listening to information on an audiocassette/CD?
- How can this audiocassette/CD be improved?
- Do you (rather) prefer reading the information in a brochure? Yes/No what would you choose?



 Will readily available audiocassettes/CDs with health information be more useful to you than brochures? Yes/No

Brochure evaluation:

- What do you like about these brochures?
- What don't you like about these brochures?

The findings of these questions will be discussed in the following sections.

5.2.2.2.1 Acceptability of the recorded audio messages

Question 1 - How do you feel about listening to information on an audiocassette/CD?

With this question, the researcher wanted to determine the attitude of the participants towards listening to information. From the responses it seems as if they misinterpreted the question as how they felt listening to the specific HIV/AIDS related audio message to which they were exposed for the research purposes, rather than listening to information as opposed to reading in general. This caused many participants to comment mainly on the HIV/AIDS issue only and not so much about their personal acceptance of the audio medium. For example, one comment stated, "the tape gives more information and advice on HIV related issues," whilst another said "it's interesting, because it gives me more information about AIDS." Other participants applied the HIV/AIDS information (on the recording) subjectively to their own lives. For example, "It hurts because the person is telling the truth," and "I felt alright. I am happy to hear about information on HIV/AIDS. What a person can do, how to eat and how to treat people with HIV/AIDS." Other participants mentioned what they learnt from the recording and the value of the information.



Nonetheless, the overall reaction to listening to audio messages was positive, with only one participant mentioning that the information is easily forgotten after listening to the audiocassette/CD. This might be due to the particular audio messages (used for the research) not being ideally formulated or specifically tailored as health communication vehicles.

In general, the responses were very positive with regard to listening to information on an audiocassette/CD. Most of the participants said that they gained more information and learnt new things. They also stated that they liked to listen to information. Four of them said that listening to the audio message evoked fear or hurt in them. Unfortunately, the interviewers didn't explore these feelings further. Possible reasons may be that HIV/AIDS is perhaps is affecting them directly and they might feel overwhelmed by the stark reality thereof.

Question 2: How can this audiocassette/CD be improved?

This was an open question that sought to determine not only what to change, but also to gain a sense of the general acceptability of the audio messages and the recorded audio medium.

The majority of the participants felt that the audio messages were fine as they are and that it would not be necessary to change anything. Other responses to this question were very interesting and should be considered when developing audiocassettes/CDs for development and/or health communication purposes. These responses are summarised as follows:

The audiocassette/CD should have a dialogue format or some role-play to make it more interesting. More voices should be added. This is consistent with the oral culture and people's reliance on the interpersonal medium of information transfer. Having the audiocassette/CD in a dialogue/ role-play format will also align it more with the principles of edutainment.



- Regarding the language used on the recordings, one participant from Rwanda suggested that the recording be made available in French. Another stated that he didn't understand all the words well because it wasn't in "Township taal." This is indicative of a mix of languages being spoken, and people not being proficient in any one of them specifically. This reality, especially for foreign people living in townships who only learn a colloquial form of language (almost like "fanagalo³") will be a challenge to any type of communication in a specific language, be it oral or written.
- Some of the participants suggested that HIV positive people be used to make the recordings. This will add to the authority of the message and will allow people will take it more seriously, as they feel someone who knows is sharing it.
- Other participants felt that more information on HIV/AIDS should be provided. The amount of information communicated on an audiocassette in order for it to be effective and not become boring, is an aspect that should be investigated further.
- It was suggested by some of the participants that these audiocassettes/CDs be made available to the public. A very important point raised by them, was that these audio messages be taken to the public to assess it. This is a very important aspect to take into consideration when such a communication instrument is developed. This ties in with the theoretical principles of participatory research and message design (Mody, 1991; Snyman & Penzhorn, 2004) as well as reader (user)-focused evaluation as discussed by De Jongh & Schellens (1997).

³ Fanagalo is a contact language (pidgin), which refers to a language that is created, usually spontaneously, out of two or more languages as a means of communication between speakers of different tongues. This usually is a simplified form of one of the languages. Fanagalo is based on Zulu, English and Afrikaans (Wikipedia, 2006).



Question 3: Do you (rather) prefer reading the information in a brochure? Yes/ No - what would you choose?

The following options were given as a guideline:

- Read the information in a brochure?
- Listen to the information on an audiocassette/CD?
- Listen to the information on an audiocassette/CD and read/ follow in a brochure?

The responses are discussed below (in order of most responses) and examples are given.

Listen to the information on an audiocassette and read/ follow in a brochure

Most of participants (19) stated that they prefer to use both media. Their reasons are summarised as follows:

- Reading and listening makes the content clearer and more understandable. This can be indicative of low levels of literacy as one participant stated, "listening helps those who don't know how to read,"
- Another reason given was that listening to the information reinforces the information being read.

Listen to the information on an audiocassette/CD

Some of the participants (11) indicated that they would prefer only to listen to the information on the audiocassette/CD. The main reason stated is directly tied to the literacy/illiteracy barrier. This was stated in responses: "There are people who can't read," and "A lot of my friends will be helped with this audiocassette."

Others said that when listening, you could understand everything. Other reasons for preferring to listen to information include that it is more personal. This may link with the preference of the oral culture for interpersonal information transfer.

One participant stated that some people are too lazy to read and another said



that there is no time to sit and read; that when you have children, they can listen too. The ability to refer back to an audiocassette/CD was also mentioned.

Read the information in a brochure

Some of the participants (10) said that they understood better if they read. One mentioned not being a good listener as well as getting bored when listening. This could be due to the nature of the experimental audio messages, but it also ties with people's learning styles and their preference to certain modes of information transfer. The ability to read anywhere and at any time was also mentioned, corresponding with the advantages of the printed medium (see section 3.3.1).

Another reason that also corresponds with the general advantages of using printed media, was that it is possible to share the information with others. One participant stated that a brochure is preferred, for "it is possible to make copies for her colleagues at work."

The possibilities to refer back to the brochure and to consult a dictionary or ask for help if certain words were not understood, were also mentioned.

From the responses, it is clear that a lot of the participants feel positive about the audio medium.

Question 4: Will readily available audiocassettes/CDs with health information be more useful to you than brochures? Yes/No - explain

The responses were as follows:

Only 3 participants felt that readily available audiocassettes/CDs with health information would not be more useful to them than brochures. One of the given reasons was that the audio message is "just the same as what is read in the brochure."



- Seven participants did not want to choose between the two media forms.
 They were either indifferent, with no preference for one medium above the other, or they preferred to have both. Their reasons included the following:
 - □ Think they are the same: you can replay and read again in the brochure
 - Prefers to have both print and audio
 - Useful to play it to friends.
- Three quarters (30) of the participants indicated that audiocassettes/CDs would be more useful to them than brochures. Their reasons included:
 - To spread the word about HIV/AIDS; will help reduce infection rates, as some people are better listeners; play them in community halls & schools
 - □ Illiteracy not everyone can read
 - Understand better when listening; prefer listening to a person speaking
 - Listening helps the concepts stick in your mind
 - □ Good when you have kids let them listen to it
 - Helpful hints for the sick people; to help those who are HIV positive deal with their problems by listening to the tape
 - Like them more.

It is interesting to note that despite the 10 participants who stated in the previous question that they prefer to read information in a brochure, in this question only 3 participants stated that readily available audiocassettes with health information would not be more useful to them than brochures. One participant stated that the audiocassette/CD is the same as what is read in the brochure - this person will perhaps feel different if a recorded audio message is developed that will have the same amount of added value than the brochure i.e. sound effects, role play and dramatisation. Seven participants were indifferent about the use of brochures and audiocassettes/CDs, stating specifically that they would want both. Thirty



participants stated for various reasons that audiocassettes/CDs with health information will be more useful to them than brochures.

5.2.2.2 Acceptability of the brochures

The questions pertaining to the acceptance of the brochures are discussed in this section.

Question 1: What do you like about these brochures?

Three quarters (27) of the participants mentioned the following when asked what they liked about the brochures:

- Educational/ informative value for example: "the advice they give," & "they give the right information,"
- Guidance and motivation towards HIV+ people, to understand them better:
 "Motivate you if you have someone with HIV at home."

Four other responses (11%) included the following:

- "They are written in different languages all the necessary,"
- Reference to the visual material: "I like them because they show and tell us what to do when you are HIV positive and where to go for help,"; "it shows the doctor that helps people and make them feel better,"; "The happy people on the front page,"
- "They look nice, they teach, they are not too long."

Seven responses (19%) may indicate that the participants did not read/ understand the brochure include the following:

- "I don't know," & participants who did not answer the question
- "Just for reading,"
- "They are OK they are readable,"



- "It 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,"
- "The fact that people with HIV are actually being taken care of by the counsellors."

Question 2: What don't you like about these brochures?

One participant (3% of the participants) stated that he/she doesn't know.

Most of the participants (24 - 67%) stated that there was nothing that they did not like about the brochures. This might have been in order to save face and not insult the researcher.

Seven participants (19%) had problems with some of the photographs used in the brochures. Their reasons included the following:

- The brochures do not show the symptoms of AIDS
- Picture of sad/ depressed people with HIV
- Some of the pictures in the brochure are not clear
- It only depicts white people.
 - □ In the brochure *Living with HIV and AIDS*, there are 14 people depicted.
 - □ From these, 8 (57%) are white and 6 (43%) are coloured. In the brochure *HIV and AIDS Counseling*, there are 8 people depicted. Of these 5 (62,5%) are white, 1 (12,5%) is Chinese and 2 (25%) are coloured.

The following two responses indicate that visual literacy is a factor that should be taken into account when using photographs and illustrations:

One participant commented on the loneliness of the brother in the Afrikaans section of the brochure Living with HIV and AIDS – this is interesting because the visual cues in the picture shows a man who is relaxing in a chair while reading a book and drinking a glass of water.



• Another participant stated that he/she didn't like the photos because they show beer/alcohol and that is wrong – the interpretation of the visual cues are interesting, because no alcohol is shown whatsoever. The only beverages shown are 4 glasses of water, 3 coffee mugs and a cup and saucer with somebody pouring milk into the cup. This indicates the value they attached to the visuals in the printed texts.

One participant (3%) stated that the brochures do not contain enough information.

Two (6%) participants had problems regarding the language – one stated that there was no Venda, thus he/she couldn't read it. The other stated that there was no English on the front page; and only on the inside and that an English-speaking person will thus not take it. This indicates a misinterpretation of the visual cues and probably that the participant could not read the main headings of the brochures which are in English on the front page and are bigger than the rest of the text.

None of the participants specifically stated that they struggled to read, or were unable to read the brochures, despite their poor comprehension of the text. This may be ascribed to the phenomenon of saving face.

5.2.2.3 Accessibility

As discussed in section 4.4.4.1.1, physical and semantic accessibility can be distinguished:

- Physical accessibility relates to the communication medium and refers to the ease of access to the actual object through which the message can be accessed.
- Semantic accessibility refers to those internal and individual factors which play a role in determining how the message is decoded and meaning is



derived, for example skills like literacy, personal factors like information processing styles and cultural factors for example orality.

In order to investigate the accessibility of the media, the following questions were selected and will be discussed in the following sections:

Audiocassette/CD evaluation:

- Physical accessibility
 - Do you own an audiocassette or CD player? Yes/No
 - If audiocassettes or CDs with health information were made available to the public, where would you expect to find them?
- Semantic accessibility
 - Did you understand the speaker well? Yes/No (If not, what bothered you?)

Brochure evaluation:

- Physical accessibility
 - Do you think brochures like these are the best way to communicate information about HIV/AIDS? Why?
- Abstract accessibility
 - No specific questions were used deductions from previous questions were made.

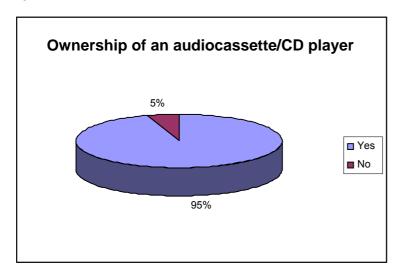
5.2.2.3.1 Physical accessibility of audiocassettes/CDs

The following questions were asked with regard to the physical accessibility of the recorded audio medium.



Question 1: Do you own an audiocassette or CD player? Yes/No

The distribution of ownership of an audiocassette/CD player is depicted in Graph 20.



Graph 20: Ownership of an audiocassette/CD player

With the exception of two, all of the participants owned an audiocassette/CD player. The two participants, who did not own such a player, indicated that they had access to one through friends and families.

The responses correspond with data from Census 2001 (Statistics South Africa, 2003: 154) regarding household goods where the radio is stated as "the most prevalent household item," with "73% of households possessing a radio in working order." Most radios include a tape deck or CD player.

Question 2: If audiocassettes or CDs with health information were made available to the public, where would you expect to find them?

The purpose of this question was to find out where the participants would expect to find recorded health messages. This question was asked, firstly, as an open

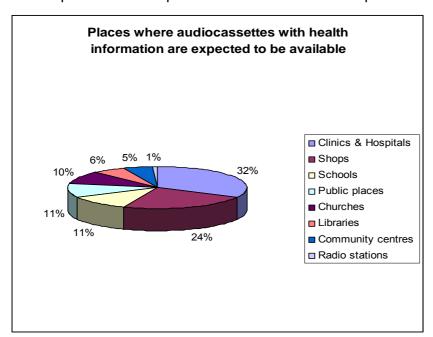


question. The interview schedule also provided some possibilities and this was used as a checklist to which the participants could indicate if they agree. The checklist included the following options:

- Clinic
- School
- Church
- Library

- Community centre
- Shopping centre
- Taxi rank
- Other

The responses to this question are illustrated in Graph 21:



Graph 21: Places where audiocassettes/CDs with health information are expected to be available

As indicated in the diagram, clinics were rated as the place where most participants would expect to find audio health messages.

In the second place most participants mentioned that they expect to find audiocassettes/CDs with health information, at shops. Specific shops that were mentioned, included health stores, pharmacies and music stores.

University of Pretoria etd - Claasen-Veldsman, MM (2007)



Ranked third highest, were schools; followed by churches, libraries and public places. The public places the participants referred to include the following:

- Taxi ranks
- Train stations
- Bars
- Parks
- Streets
- Hotel



5.2.2.3.2 Semantic accessibility of the audiocassettes/CDs

The following questions were asked with regard to the semantic accessibility of the recorded audio medium.

Question 3: Did you understand the speaker on the audiocassette/CD well? Yes/No

If not, what bothered you?

The reason for this question was to determine whether the listeners could clearly understand the speakers of the recorded audio messages. This refers to their quality of speech as well as the language used.

All the participants gave positive feedback and said that they understood the speaker well; this applied to all the different languages to which they listened. Only two participants had difficulty in understanding the speaker on the audiocassette, one had a hearing problem and the other was a foreigner who didn't speak English very well. One participant said, with reference to the content, that some things were not clear. For example: "what is a little alcohol?" (The guideline with regard to alcohol intake as provided in the original text - see Appendix A).

5.2.2.3.3 Physical accessibility of the brochures

Question 1: Do you think brochures like these are the best way to communicate information about HIV/AIDS? Why?

Most of the participants 32 (86%) stated that brochures were the best way to communicate information about HIV/AIDS. Their reasons can be summarised as follows:



- Regarding the accessibility "you don't need any kind of player," "you can read anytime you want," "you can refer back to it; you can read it in private,"
- It is available for free
- It is easily distributed.

Even though most of the participants were in favour of the brochures, some suggested that they be combined with other media, like radio and television, in order to make the information more accessible. Two of these participants specifically stated that it would only work for people who can read.

Four (11%) participants said that they did not think brochures were the best way to communicate information about HIV/AIDS. Their reasons included the following:

- People cannot all read
- TV and radio are better brochures must be combined with other media to enhance access to information
- Home visits would be preferable.

5.2.2.3.4 Semantic accessibility of the brochures

With reference to the previous question, most of the participants only referred to the physical accessibility of the brochures in their responses i.e. the ease of use. As semantic accessibility refers to the decoding of the message and is thus directly related to comprehension, is it interesting to note that only a few of the participants mentioned that printed media is inaccessible to the people who can't read.

Many of the participants commented on the photos used in the brochures. The high importance placed on the use of visual communication might indicate a reliance on the visual material in order to derive meaning from message and not necessarily from the written text. The use of photos and visual material in



development communication is a study field on its own, and it should be properly researched and tested before used in any communication material. Visuals should not only be regarded as an aesthetic element adding to the attractiveness of a text, but as an integral part in communicating a message clearly and effectively.

5.3 Findings of the focus-group interviews

In all four focus-group interviews, great parts of the discussions were about the use of the pictures in the brochures. This emphasised the importance of the use of visual material and how it assists people in their understanding the message. Many of the participants mentioned the advantages of the printed medium (see section 3.3.1) as a reason why they prefer brochures, namely that you can take it away and read it at a later stage. The fact that you can refer back to it was also important to them.

Some participants mentioned that not all people can read and that audiocassettes/CDs will overcome this problem. It was stated that audiocassettes/CDs could also be listened to in a person's own time and according to preference. Some of the participants said that where the brochure was difficult to read, with the recorded audio message it feels as if someone is explaining something to you. All the participants who took part in the focus group interviews had an audiocassette/CD player at home.

Their opinions on how to improve the audio messages included the addition of music. One participant mentioned that it sounded as if the Sotho speaker on the recording was reading and that he should communicate more naturally. This emphasises the importance of proper presentation and highlights the need of guidelines with regard to the structuring and production of such messages.



Corresponding to the findings of the individual interviews, even though some participants clearly preferred the use of one medium to the other, they were all positive towards both media forms. All could appreciate the fact that audiocassettes/CDs will be useful to people who can't read. When asked where such audiocassettes/CDs should be made available, clinics and hospitals were the most mentioned places. What also came out of the focus group interviews, supporting the main argument of the study, was that the recorded audio media should be used as an alternative and additional means of information communication in the battle against HIV and AIDS.

5.4 Summary

In this chapter, the findings were presented in three sections:

- The first part presented the demographic data of the participants for both the audiocassette/CD and brochure evaluation
- The second part consisted of the findings of the individual interviews. This
 was structured according to the evaluation criteria of comprehension,
 acceptability, and accessibility
- The third part discussed the findings of the focus group interviews.

In the next and final chapter, the conclusions will be discussed and recommendations will be made.



6 - Conclusion and recommendations

6.1 Introduction

In the previous chapter the data analysis was presented and the research findings discussed. This final chapter will conclude the findings and recommendations will be made.

This chapter is structured as follows:

- The research question and sub-questions will be addressed through a discussion of the conclusions reached through the data analysis, as presented in the previous chapter.
- Recommendations will be made with reference to the findings, as discussed in the previous chapter.
- This study will be concluded with the final statements.

6.2 Conclusions

This study aimed to answer the main research question, which asked whether recorded audio media, in the form of audiocassettes/CDs, could be used as an alternative to brochures in the dissemination of health information in South Africa.

This main research question is answered through the sub-questions, which will be discussed in the following sections.

6.2.1 Sub-question 1 - How effective is print-based health communication in South Africa?

The findings of this study indicate that although print brochures are generally accepted and appreciated as a communication medium in health and HIV/AIDS



communication, the comprehension of the messages is not very effective. A possible reason for the poor comprehension of the written texts may be limited reading skills. The preference for oral communication may also have an impact on the use of printed media compared to other available oral media or means of information gathering.

The findings regarding the comprehension of the printed brochures (see section 5.2.2.1), are in accordance with the findings of the study by Carstens & Snyman (2003), in which they question the effectiveness of print-based leaflets and brochures as stand-alone communication media.

Many of the participants in the brochure evaluation, agreed that they liked the brochure and that they did not want to change anything; despite their obvious limited skills in decoding and reading the written text. This may be due to what Henning, van Rensburg & Smit (2004: 54-55) describes as a "preferred self," referring to participants who tell half-truths for self-protection and to keep themselves from being put in a bad light. It may also have been caused by an asymmetrical relationship between the participant and the interviewer. In this case the participants may have experienced that they were expected to be able to read the brochures, and if they found it difficult, they did not want to focus any attention on it.

For the illiterate and semi-literate, print media is inaccessible in terms of semantic access. The visually impaired experience the medium as physically inaccessible, as they cannot see the text. Recorded audio media overcome the limitations of print as they provide the illiterate and visually impaired with physical and semantic access to the information.



6.2.2. Sub-question 2 - How effective is the recorded audio medium in health communication?

With reference to the overall comprehension of the messages (see section 5.2.2.1), it can be deduced that the semantic accessibility of the recorded audio messages is higher than that of the printed brochures. This indicates the potential of this medium for use in health communication.

The positive feedback of the participants regarding the acceptability and accessibility of the recorded audio medium also indicate the potential for this medium. Their suggestions, with regard to how the recorded messages could be improved, provided valuable input that should be considered when such a health communication tool is developed. These recommendations are discussed in the next section.

The expressed value such communication media may have to the participants, warrants further investigation and research. The fact that the majority of the participants stated that audiocassettes/CDs with health information would be more useful to them than brochures (refer to section 5.2.2.2.1), indicates that more research should be done on the use of recorded audio media for information dissemination in South Africa.

Although the potential of recorded audio media needs to be explored further, the findings of the study are in accordance with the positive experiences of other studies; for example, the use of the KEY cassettes in Pakistan (Collumbien, & Douthwaite, 2003; Collumbien, Douthwaite & Khan, 1999) and the study of Urgoiti (1991) – see section 2.4.2.1.2 and 2.4.2.1.4.



6.2.3. Sub-question 3 - Can audiocassettes/CDs be employed to communicate health information to the general public?

With reference to the findings of this study, compared with the two specific texts that were used, the recorded audio messages were more effective in communicating the information than the brochures. Although for some questions, the difference was relatively small, in all eight questions, the overall recall of the group who listened to the audio texts was higher than the group who read the brochure. The prevalence of statements not referred to in the text was, with the exception of two questions, higher for the group who read the brochure. This prevalence can be an indication that they either did not effectively read the text or that they did not effectively understand what they had read. This indicates the high level of semantic access to the messages.

The physical accessibility of both media forms is good, on the condition that the availability is the same for both. Brochures have the advantage that no mechanical device is needed to access the message. Referring to section 5.2.2.3.1, most of the participants owned an audiocassette or CD player in their personal capacity, thus indicating a good physical accessibility. The two participants who did not own such a player indicated that they had access to one through their family or friends. As most radios include a tape deck or CD player, this high level of physical accessibility makes viable a trial project with audio health messages for personal use. In the case of audiocassettes/CDs being suggested as an alternative communication medium to brochures, further research is necessary to investigate possible ways to make it available.

Despite the fact that many participants, when asked how they felt to listen to information, interpreted the question as relating to the two sample texts played to them; overall, they had a positive reaction to listening to information.



Despite the limitations discussed in section 4.5, the findings of this exploratory study indicate that recorded audio media has a lot of potential as a medium for health communication and can indeed be viewed as a suitable alternative to printed brochures. As discussed in the following sections, this potential should be further explored.

6.3 Recommendations

From the findings of the study, the following recommendations can be made.

6.3.1 Taking the target audience into account

With reference to the findings regarding the demographic data of the participants (section 5.2.1), the following should be taken into account:

Regarding the individual factors – it is important to take the target audience into account when designing health communication campaigns and messages; as Omosa (1998) rightfully stated: "a proper match between the audience, message and medium is necessary in order to communicate effectively."

People not only differ culturally, but also in their media preferences and their skills to decode texts, whether visual, aural, or written. A continued dialogue with the target audience will lead to a better design of health messages, in terms of both the surface and the deep structure. These two structures have been identified by Rescinow (cited in Qakisa 2003: 56) and deal with creating culturally appropriate and sensitive campaign material. The surface structure focuses on the intervention campaign material and "deals with matching intervention material with, and messages to, observable social and behavioural characteristics of a target population." This also includes the medium as it "addresses the channels used, and the settings that are most appropriate to deliver a message," (Rescinow cited in Qakisa 2003: 56). The deep structure addresses the cultural dimensions of the target audience and Rescinow (cited in Qakisa 2003: 56)



states that it "reflects on how cultural, psychological, environmental and historical factors influence health behavioural differences across racial groups and populations. Before the development of a health message or an HIV/AIDS message, it is important to determine for whom we are developing the message."

Regarding the social factors – it should be taken into account that in the South African context, a large portion of the population aged 20 years and above, have limited schooling (see section 3.3.2.2). The choice of communication media and presentation formats should be appropriate when designing communication messages. This is especially important with regard to health information (especially in the light of the HIV/AIDS situation).

Most of the participants mentioned the clinic as their main healthcare facility. The clinic, with reference to the health workers, is mentioned as their main source of health information. The second rated source of health information is family and friends. In both cases, there is a strong emphasis on oral (personal) communication and this should be taken into account when designing information communication media. Recorded audio messages might be more acceptable and accessible than print materials.

6.3.2 Improving the audio messages

The participants in the evaluation of the recorded audio messages provided valuable input in their recommendations on how the messages could be improved. These recommendations include the following:

- Use HIV+ people or popular figures to do the recording of the messages –
 this will add authority to the message.
- Use a dialogue, drama or storytelling format to make it more interesting.
- Look at the amount of information communicated some participants felt that too little was communicated, while others felt the format boring.
- Add music and sound effects.



These suggestions tie with the principles and techniques of Edutainment, discussed in section 2.4.2.1.4. The suggestion to have HIV+ people or popular figures like sport stars record HIV related messages, links with the concept of "parasocial interaction", which can be described as an "emotional and intellectual involvement," (Brown, Kiruswa & Fraser, 2003: 97). The US basketball star 'Magic' Johnson's involvement in HIV/AIDS awareness campaigns, is an example where such a relationship with the public has a positive impact on HIV prevention, "especially among young adults at risk for HIV infection," (Brown & Basil, cited in Brown, Kiruswa & Fraser, 2003: 97).

Interweaving educational messages with a strong storyline is also in line with orality; with specific reference to the oral tradition of storytelling as a means of information transfer (see section 3.3.2.3).

6.3.3 Making the recorded audio messages available to the public

The physical accessibility of the recorded audio messages will, first of all, be determined by the way that they are made available to the public. The specific use, purpose and the development of such audiocassettes/CDs will play a great role in determining the accessibility to the messages.

As explained by Adhikarya & Colle (1983) (see section 2.4.2.1.5), recorded audio messages on health issues can be made available to the public in two formats, either for personal or public use.

6.3.3.1 Recorded audio messages available for personal use

If audiocassettes/CDs are to be considered as alternatives to brochures, they should be available in the same way as brochures – to be taken by the public for free and available for their personal use.



There are also other possibilities to make recorded health audio messages available to the public, for example, to combine such an audiocassette/CD with a specific product like anti-retroviral medication, or pills for contraception (Collumbien, Douthwaite & Khan, 1999; Collumbien & Douthwaite, 2003).

6.3.3.2 Recorded audio messages available for public use

Various possibilities can be explored to make recorded health messages available to the general public. Based on the principle of individual or group listening (Adhikarya & Colle, 1983) (see section 2.4.2.1.5), the following possibilities will be discussed.

6.3.3.2.1 Individual listening

A good start would be to make audio health messages available at clinics in the form of listening stations. This will make it possible for people to listen to various messages on health topics. Clinics are suitable for such a project, because the participants (representing the general public) view the clinic as the main place where health information can be gained. A listening station could be placed in the waiting area, for example, where people can listen to health messages while they are waiting to see the health workers. If they have questions after listening, people can ask the health workers for clarification.

Depending on the topics, this may take some of the workload off the health workers, as certain queries may be satisfied through listening to the information. By no means does the use of recorded health messages suggest replacing personal contact; it will only be used as a tool to disseminate general information. Even though it is more suitable and accessible than printed media for the illiterate or visually disabled, it can also be used as a supplementary information source for the literate. Such a method of information communication can be used strategically within a health care setting for routine information. For example, it



could be used for explaining certain procedures that should be followed within a particular set-up for various services; or general information and instructions with regard to medicine use. In the South African context, this may be used in terms of explaining the use of anti-retroviral medication.

6.3.3.2.2 Group listening

Various opportunities can be created for group listening. Such activities could include women's or mothers' meetings, or home-based care giver groups which could make use of recorded health messages as part of their training. The medium can be used to listen to recorded messages, but also as an interactive communication tool where people record their opinions and voices. This can be used to create messages on 'the people's voice' about HIV/AIDS.

6.3.3.3 Suggestions of participants to make recorded audio messages available

When asked where they expected to find health-related audio messages, clinics were rated highest. The responses reinforced the researcher's idea to start at clinics and public hospitals to make health information available on audiocassette/CD.

The second place most respondents mentioned where they expect to find audiocassettes with health information were shops. Specific shops that were mentioned included health stores, pharmacies and music stores.

Schools, churches and libraries were also mentioned as places where the respondents expected to find health information tapes. These places are known and valued for their role in satisfying people's information needs.



It was also suggested that these audio messages might be found through radio stations. This links with the possibility of airing the recorded messages on community radio stations and thus incorporating them even further in a mixed media approach.

6.4 Suggestions for further research

The following suggestions for further research can be made.

- Further research is necessary with regard to the design and development of recorded audio messages that will contribute to an enhanced recall of the content of the messages.
- The possibility of having combined media instead of just having alternatives. An example of this would be to combine the audio messages with a printed document in which concepts are reinforced through text and effective visuals. This combination of audio and printed messages should be investigated within the South African context, as the "World Bank Institute course teams have found audiocassettes plus print to be a most cost effective media for delivering learning," (World Bank Institute, 2006).
- Regarding physical accessibility a suggestion for further research is to determine how many government clinics, public hospitals and other public health facilities exist and how many people make use of these facilities. This will give a good indication of the amount of people who could get access to health information in audio format at clinics either through listening stations or by making audiocassettes/CDs available for personal use.
- Regarding semantic accessibility further research should be undertaken to compare the semantic accessibility of audio and printed texts. A suggestion



would be to use a topic that is wholly unfamiliar to the target audience, in order to rule out the influence of existing knowledge.

- Further research is necessary to design guidelines for the development and creation of recorded audio messages for use in health communication, especially HIV/AIDS communication.
- The various possibilities to implement and manage listening stations, give another suggestion for further research. Even though one ordinary audiocassette player on a table in a waiting room can be viewed as a listening station, various technological possibilities exist, for example:
 - Fixed listening stations having a listening station through a telephone system, where people can dial and select the message they want to hear. Such a system can even be connected to a counselling section or even selected toll-free help lines.
 - Mobile listening stations where the application of listening to recorded health messages is not limited to a specific place, for example, people can dial a number on their cell phones to access certain health messages and specific health information.

6.5 Conclusive statements

In the literature review, it has been established that all people need information in order to make informed decisions. This study focused on health information and, within the South African context, HIV/AIDS related information is crucial with regard to the health of society.

Access to information is the first determining factor with regard to the effectiveness of any communication message. It is important that people have access to information, because without it, a person cannot make informed decisions. The accessibility of a message (information) depends on the physical

University of Pretoria etd - Claasen-Veldsman, MM (2007)



access to the message (and subsequently the medium which carries the message); as well as semantic access – whether the meaning of the message is effectively understood. The comprehension of a message is dependant upon these aspects.

This exploratory study investigated the accessibility of recorded audio messages (in the form of audiocassettes/CDs) compared to printed brochures, with regard to two selected texts on HIV/AIDS. The findings of the study indicate the definite potential of the use of recorded audio media in health and HIV/AIDS communication, and should be explored further.

All media have positive and negative attributes, which is why there is no such thing as the ultimate medium. Making information, especially information that is necessary for the well being of society, accessible to all should be the goal of those who provide information.

Different media forms complement each other and, by increasing the media mix of any communication campaign, the reach of the campaign is increased. Not only does it allow for more people to be reached, but through consistent (although different in format) repetition, there is a higher rate of exposure, reinforcing the intended meaning of the message. This increases the potential for behaviour change. As stated by Balit (1999), "the combination of several media approaches and tools with interpersonal channels multiplies the impact of communication campaigns."

There are certain limitations of print media, which exclude people from accessing the message it contains. On a physical level, print is inaccessible to those who cannot see – this is not only the blind, but includes a variety of visual disabilities and limitations, for example, the partially sighted and the elderly. On an abstract level, with reference to semantic accessibility, printed texts exclude those who



are not proficient at decoding the symbols. This again not only refers to the illiterate, but all people who battle to read.

With regard to the packaging of information, it is important that the intended target audience be taken into account. There should be a "match between the audience, the message and the medium," (Omosa, 1998). A variety of related messages may be needed in order to reach all members of a particular society: one size does not fit all.

Although recorded audio media have their drawbacks on the physical level – they are inaccessible to the hearing disabled and it require a machine in order to access the message – they are accessible to all on a semantic level; literate and illiterate alike. It is not only a matter of skills, but also of personal and cultural preference. Through accommodating various individual preferences for information communication, more people are reached. The repackaging of information should be an increasingly important task of those who provide access to information.

Creating informative audiocassettes/CDs that are available to the general public and communicate important development and/or health information in a creative way can play an important role in the general health education of the South African public.

Making health information accessible through the use of recorded audio messages, will also contribute to a larger portion of the population becoming (more) health literate. As discussed in section 3.2, an increase in health literacy may contribute to the overall well being of the nation. This relates to the relationship between health and literacy and the report of the National Work Group on Literacy and Health (1998). That report refers to a study done in Arizona (USA), where it was found that, "subjects with the poorest reading skills had poorer physical and psychological health than subjects with better reading skills." It also found that, "those with very low literacy skills had markedly higher

University of Pretoria etd - Claasen-Veldsman, MM (2007)



health care costs than subjects with more well-developed literacy skills," (National Work Group on Literacy and Health, 1998: 169). This situation can be overcome if an available alternative to print-based information is offered.

Incorporating audiocassettes/CDs into the media mix of HIV/AIDS and other development and/or health communication campaigns, will contribute to the overall effectiveness of the communication strategy.



7. References

Abdool Karim, S.S. & Abdool Karim, Q. 2005. *HIV/AIDS in South Africa*. New York: Cambridge University Press.

Adhikarya, R. & Colle, R.D. 1983. Reaching out: the role of audiocassette communication in rural development. Singapore: Asian Mass Communication Research and Information Centre.

African National Congress (ANC). 1994. A National Health Plan for South Africa. Johannesburg: African National Congress.

Aitchison, J. 1999. Reading and writing the new South Africa: literacy and adult basic education and training in South Africa. In: Stilwell, C. Leach, A & Burton, S. 1999. *Knowledge, Information and Development: an African Perspective*. Pietermaritzburg: School of Human and Social Studies pp143-157.

AMC CANCER RESEARCH CENTER. 1994. Beyond the brochure: alternative approaches to effective health communication. [Online]. Available: http://www.cdc.gov/cancer/nbccedp/bccpdfs/amcbeyon.pdf Accessed: 2007/04/24.

Babbie, E. 2004. *The practice of social research*. 10th ed. Belmont: Wadsworth.

Balit, S. 1999. *Voices for change: rural women and communication*. Rome: FAO [Online]. Available: http://www.fao.org/docrep/X2550E/X2550e04.htm Accessed: 2006/06/06.

Banerjee, S. 1977. *Audiocassettes: the user medium.* Paris: United Nations Educational, Scientific and Cultural Organization.



Berg, B.L. 1998. *Qualitative research methods for the social sciences*. London: Allyn & Bacon.

Black, **A**. 2006. Information history. Chapter 11. In: Cronin, B. (Ed.). 2006. Annual Review of Information Science and Technology (ARIST) (40): 441-473.

Blenkiron, **P**. 2001. Coping with depression: a pilot study to assess the efficacy of a self-help audio cassette. *British Journal of General Practice* 51: 366-370.

Boon, **J.A**. 1992. Information and development: towards an understanding of the relationship. *South African Journal of Library and Information Science* 60(2): 63-74.

Bradley, O. et al. 1999. A STD/HIV prevention trial among adolescents in managed care. *Pediatrics* 103(1): 107-115.

Bradshaw, D. et al. 2004. South African National Burden of Disease Study 2000: estimates of provincial mortality. Cape Town: South African Medical Research Council. [Online]. Available: http://www.mrc.ac.za/bod/estimates.htm Accessed: 01/08/2005.

Britz, J.J. 1996. *Inligtingsetiek met spesifieke verwysing na die beroep van die Inligtingkundige – 'n Christelike perspektief*. Unpublished doctoral thesis - Doctor Divinatus thesis. University of Pretoria.

Brown, D. 1998. *Voicing the text – South African oral poetry and performance*. Cape Town: Oxford University Press.

Brown, D. 1999. *Oral literature & performance in South Africa*. Oxford: James Currey



Brown, W.J., Kiruswa, S. & Fraser, B.P. 2003. Promoting HIV/AIDS prevention through soap operas – Tanzania's experience with Maisha. *Communicare* 22(2): 90-111.

Carstens, A. 2004. Tailoring print materials to match literacy levels: a challenge for document designers and practitioners in adult literacy. *Language Matters* 35(2): 459-484.

Carstens, A. & Snyman, M. 2003. How effective is the Department of Health's leaflet on HIV/AIDS counselling for low literate South Africans? *Tydskrif vir Nederlands & Afrikaans* (10)1: 112-136.

Chandler, **D**. 1994. *Semiotics for beginners*. [Online]. Available: http://www.aber.ac.uk/media/Documents/S4B/ Accessed 2007/03/01.

Colle, R. 2002. Chapter 6. Threads of development communication. In: Servaes, J. (Ed.), *Approaches to Development Communication*. Paris: UNESCO.

Collumbien, M, Douthwaite, M & Khan, S. 1999. *The use of audio-cassettes in contraceptive social marketing of hormonal methods in Pakistan*. London: Centre for Population Studies, London School of Hygiene and Tropical Medicine.

Collumbien, M. & Douthwaite, M. 2003. Pills, injections and audiotapes: reaching couples in Pakistan. *Journal of Biosocial Sciences* 35: 41-58.

Connell, D., Goldberg, J.P. & Folta, S.C. 2001. An intervention to increase fruit and vegetable consumption using audio communications: in-store public service announcements and audiotapes. *Journal of Health Communication* 6(1): 31-43.

Coulson, N., Goldstein, S. & Ntuli, A. 1998. Promoting health in South Africa – an action manual. Sandton: Heinemann.



Dalton, G. 1989. The journal in the post-typographic age – are we creating an electronic elite? *Suid-Afrikaanse Tydskrif vir Biblioteek- en Inligtingkunde* 57(1): 18-27.

Davis, G.B. & Olson, M.H. 1985. *Management information systems: conceptual foundations, structure and development.* New York: McGraw-Hill.

Debons, A. 1988. *Information science: an integrated view.* Boston: GK Hall & Co.

De Haan, M. 1996. The health of Southern Africa. 7th ed. Kenwyn: Juta.

De Jongh, M. & Schellens, P.J. 1997. Reader-focused text evaluation: an overview of goals and methods. *Journal of Business and Technical Communication*. 11(4): 402-432.

De Vos, A.S. (Ed.). 1998. Research at grass roots – a primer for the caring professions. Pretoria: Van Schaik Publishers.

De Vos, A.S. et al. 2005. Research at grass roots – for the social sciences and human service professions. 3rd ed. Pretoria: Van Schaik Publishers.

Doak, C.C., Doak, L.G. & Root, J.H. 1996. *Teaching patients with low literacy skills*. 2nd ed. Philadelphia: J.B. Lippincott Company.

Dowse, R. & Ehlers, M. 2004. Pictograms for conveying medicine instructions: comprehension in various South African language groups. *South African Journal of Science* 100 (11&12): 687-693.

Du Plooy, A.P. 1988. Community information for the functionally illiterate in South Africa by means of audiocassettes. *Musaion* 6(1): 2-20.



Du Plooy, G.M. 1997. *Introduction to communication - communication research.* Kenwyn: Juta & Co.

Du Plooy, G.M. 2001. Communication research – techniques, methods and applications. Lansdowne: Juta.

Elling, R. 1997. Revising safety instructions with focus groups. *Journal of Business and Technical Communication*, vol 11(4): 451 – 468 [Online] Available: http://www.tbm.tudelft.nl/webstaf/riene/jbtc.htm Accessed: 2007/04/24.

Fallis, D. 2006. Social epistemology and Information Science. Chapter 12. In: Cronin, B. Ed. 2006. *Annual Review of Information Science and Technology ARIST* (40): 475-519.

FAO. 1989. Guidelines on communication for rural development: a brief for development planners and project formulators. [Online]. Available: http://www.fao.org/docrep/t7974e/t7974e00.htm Accessed: 2007/04/24.

FAO. 2005. *Communication for development Roundtable report.* 9th United Nations Roundtable on Communication for Development held in Rome 6-9 September 2004. [Online]. Available:

http://www.fao.org/docrep/008/y5983e/y5983e00.htm Accessed: 2007/04/24.

Fiagby, E.D.K. 1996. The literacy programme – a channel for education on fertility reduction in rural Ghana – the case of the mass media support for adult population education project. *Proceedings of the 1996 World Conference on Literacy*. [Online]. Available:

http://www.literacy.org/products/ili/webdocs/ilproc/ilprocef.htm Accessed 2007/04/24.

Freysen, J.B. et al. 1989. *Media science*. Kempton Park: Audio Visual Aids.



Gorman, G.E. & Clayton, P. 2003. *Qualitative research for the Information professional.* 2nd Ed. London: Facet Publishing.

Griffin, J.; McKenna, K. & Tooth, L. 2003. Written health education materials: making them more effective. *Australian Occupational Therapy Journal* 50: 170-177.

Guy, **J**. 1994. Making words visible: aspects of orality, literacy, illiteracy and history in Southern Africa. *South African Historical Journal* 31: 3-27.

Hartley, J. 1988. Using principles of text design to improve the effectiveness of audiotapes. *British Journal of Educational Technology* 19(1): 4-16.

Havelock, **E**. 1991. The oral-literate equation: a formula for the modern mind. In: Olson, D.R. & Torrance, N. 1991. *Literacy and Orality*. New York: Cambridge University Press pp11-27.

Heinich, R., Molenda, M. & Russell, J.D. 1985. *Instructional media and the new technologies of instruction*. 2nd Ed. New York: Macmillan Publishing Company.

Heinich, R., Molenda, M. & Russell, J.D., & Smaldino, S.E. 2002. *Instructional media and technologies for learning.* 7th Ed. New Jersey: Pearson Education, Inc.

Henning, E., van Rensburg, W. & Smit, B. 2004. Finding your way in qualitative research. Pretoria: Van Schaik Publishers.

Horton, F.W. 1983. Information literacy vs. computer literacy. *ASIS Bulletin* 9(4): 14-16.

IFLA. 2006. *IFLA/FAIFE Libraries and Intellectual Freedom*. [Online]. Available: http://www.ifla.org/faife/faife/presen.htm Accessed: 2006/05/19.



Ingwersen, P. 1992. Conceptions of information science. In: Vakkari, P. & Cronin, B. (Eds.). 1992. *Conceptions of Library and Information Science – Historical, empirical and theoretical perspectives*. Proceedings of the International Conference held for the celebration of the 20th Anniversary of the Department of Information Studies, University of Tampere, Finland, 26-28 August 1991 pp 299-312.

Iser, W. 1978. The act of reading: a theory of aesthetic response. London: Routledge & Kegan Paul.

Iwuji, **H.O.M**. 1990. Librarianship and oral tradition in Africa. *International Library Review* 22(1): 53-59.

Jauss, H. R. 1982. *Toward an aesthetic of reception.* Minneapolis: University of Minnesota Press.

Jiyane, V. & Ocholla, D.N. 2004. An exploratory study of information availability and exploitation by the rural women of Melmoth, Kwa-Zulu Natal. *South African Journal of Library and Information Science* 70(1): 1-8.

Kaniki, **A**. 1999. Community profiling and needs assessment. In: Stilwell, C. Leach, A & Burton, S. 1999. *Knowledge, Information and Development: an African Perspective*. Pietermaritzburg: School of Human and Social Studies pp187-201.

Kaschula, R.H. 1993. Foundations in Southern African oral literature. Johannesburg: Witwatersrand University Press.

Kaschula, R.H. (Ed.). 2001. *African oral literature – functions in contemporary contexts.* Claremont: New Africa Books.



Kelder, **R**.1996. Rethinking literacy studies: from the past to the present. *Proceedings of the 1996 World Conference on Literacy*. [Online]. Available: http://www.literacyonline.org/products/ili/pdf/ilprocrk.pdf Accessed 2004/06/24.

Kellogg, R.T. 1995. Cognitive Psychology. California: SAGE Publications, Inc.

Kenyon, C.; Heywood, M. & Conway, S. 2002. Mainstreaming HIV/AIDS progress and challenges in South Africa's HIV/AIDS campaign. In: Ntuli, A. (Ed.). 2002. South African Health Review 2001. Durban: Health Systems Trust. pp 161-183. [Online]. Available: ftp://ftp.hst.org.za/pubs/sahr/2001/sahr2001.pdf Accessed 2007/04/24.

Leach, A. 1999a. "The best thing is communicating verbally": NGO information provision in rural KwaZulu-Natal and some observations relating to library and information services. In: Stilwell, C. Leach, A & Burton, S. 1999. *Knowledge, Information and Development: an African Perspective*. Pietermaritzburg: School of Human and Social Studies pp161-186.

Leach, A. 1999b. The provision of information to adults in rural KwaZulu-Natal, South Africa. *Libri* 49: 71-89.

Leedy, P.D. & Ormrod, J.E. 2001. *Practical research – planning and design*. 7th ed. Upper Saddle River, New Jersey: Merrill Prentice Hall.

Leedy, P.D. & Ormrod, J.E. 2005. *Practical research – planning and design.* 8th ed. Upper Saddle River, New Jersey: Merrill Prentice Hall.

Made, S.M. 1994. The state of information provision to rural communities in Anglophone East and Central Africa. In: *Proceedings of the seminar on information provision to rural communities in Africa*, Gaberone, Botswana, 22-25 June. Uppsala University Library: pp. 32-37.



Maepa, M.E. 2000. Information needs and information-seeking patterns of rural villagers living in the Northern Province. Unpublished D Litt et Phil Thesis. Johannesburg: RAU.

Marsland, D., Leoussi, A.S. & Norcross, P. 1994. Disability abated: audio-cassettes for the visually impaired. *Journal of the Royal Society of Health* 114(1): 29-32.

McGarry, K. 1991. *Literacy, communication & libraries – a study guide*. London: Library Association Publishing Ltd.

Mchombu, K.J. 1992. Information needs for rural development: the case study of Malawi. *African Journal of Libraries, Archives and Information Science* 2(1): 17-32.

Melkote, S.R. 1991. Communication for development in the Third World. New Delhi: Sage.

Meyer, H. 2003. Communicating mechanisms of indigenous knowledge systems: gateway to untapped resources. *Mousaion* 21(1): 27-52.

Mody, B. 1991. *Designing messages for Development Communication.* London: Sage.

Morris, C.D. & Stilwell, C. 2003. Getting the write message right: review of guidelines for producing readable print agricultural information materials. *South African Journal of Library and Information Science* 69(1): 71-83.

Murthy, L. 2005. Personal communication, 11 April 2005.

Naidoo, J. & Wills, J. 2000. *Health promotion – foundations for practice*. 2nd ed. China: Baillère Tindall.



National Work Group on Literacy and Health. 1998. Communicating with patients who have limited literacy skills: report of the National Work Group on Literacy and Health. *Journal of Family Practice* 46(2): 168-176.

Newby, T.J., Stepich, D.A., Lehman, J.D. & Russell, J.D. 2000. *Instructional Technology for Teaching and Learning – Designing Instruction, Integrating Computers, and Using Media*. 2nd ed. New Jersey: Prentice-Hall, Inc.

Nicholson, D. 2002. The "Information-starved" – is there any hope of reaching the "information super highway"? *68th IFLA Council and General Conference, August 18-24, 2002*. [Online]. Available: http://www.ifla.org/IV/ifla68/papers/038-134e.pdf Accessed 21/05/2004.

Omosa, E. 1998. The Use and Application of Various Communication Channels at Local and International Levels. In: *Proceedings of the Workshop on Women in Agriculture and Modern Communication Technology*. 30 March to 3 April; Denmark. [Online]. Available: http://www.husdyr.kvl.dk/htm/php/tune98/12-EileenOmosa.htm Accessed: 2004/06/21.

Onwubiko, **C.P.C**. 1999. Information Repackaging for the 21st Century Rural Nigerian. *African Journal of Library, Archives and Information Science*, 9(2): 187-194.

PANOS. 1998. *Information, Knowledge & Development*. [Online]. Available: http://www.panos.org.uk/resources/reportdetails.asp?id=1063 Accessed 2006/01/16.

Parker, W., Dalrymple, L. & Durden, E. 1998. Communicating beyond AIDS awareness – A manual for South Africa. Auckland Park: Beyond Awareness Consortium.



Petersen, N. R. 1992. Normativity, validity and relativity. Reader-orientated methods and the South African context. In: Lategan, B. (Ed.). 1992. *The reader and beyond: theory and practice in South African reception studies*. Pretoria: HSRC pp 255-264.

Pienaar, A. 2005. Vigs lei vanjaar tot 47% van SA sterftes. *Beeld* 9 September p 6.

Population Media Center – Ethiopia & Save The Children USA. 2004. Evaluation report of the Maleda audio cassette serial drama project. Addis Ababa

Power, D.J. 1999. *The Use of Audio in Distance Education*. [Online]. Available: http://www1.worldbank.org/disted/Technology/print_recorded/aud-01.html Accessed 2004/06/21.

Pretorius, E.J. 2004. Editorial – An Introduction to Adult literacy in the African context. *Language Matters* 35(2): 343-347.

Pridmore, P. 2001. Health Literacy: a New Communication Challenge for Health. In: *The EID Review*. [Online]. Available: http://ioewebserver.ioe.ac.uk/ioe/schools/leid/docs/eidreview/EIDRev5P09to15.pdf Accessed 2006/01/09.

Qakisa, M.E. 2003. Theories, models and strategies in developing an effective HIV/AIDS campaign in South Africa. *Communicare* 22(2): 45-64.

Rowntree, **D**. 1999. How we can teach with Audio? [Online]. Available: http://www1.worldbank.org/disted/Teaching/Delivery/aud-01.html Accessed 2006/10/06.



Saracevic, T. 1992. Information Science: origin, evolution and relations. In: Vakkari, P. & Cronin, B. (Eds.). 1992. *Conceptions of Library and Information Science – Historical, empirical and theoretical perspectives*. Proceedings of the International Conference held for the celebration of the 20th Anniversary of the Department of Information Studies, University of Tampere, Finland, 26-28 August 1991 pp 5-27.

Schramm, W. 1977. *Big Media, Little Media – Tools and Technologies for Instruction*. California: SAGE Publications.

Scottish Council for Technology. 1999. Audio. [Online]. Available: http://www1.worldbank.org/disted/Technology/print_recorded/aud-02.html Accessed 2006/10/06.

Schutte, **P.J**. 2003. Tswana-speaking students' perceptions of HIV/AIDS and poverty: implications for communication. *Communicare* 22(2): 25-44.

Servaes, J. 1995. Development communication – for whom and for what? *Communicatio* 21(1): 39-49.

Servaes, J. 1999. *Communication for development – one world, multiple cultures*. Cresskill, NJ: Hampton Press.

Shisana, O. et al. 2005. South African National HIV prevalence, HIV incidence, behaviour and communication survey, 2005. Cape Town: HSRC Press.

Sisulu, E. 2004. *Keynote address – Symposium on Cost of a Culture of Reading*. [Online]. Available: http://www.centreforthebook.org.za/events/culture_reading.html Accessed 2005/10/06.



Snyman, M.E. 2002. Using printed texts to communicate information in the South African development context: a reception study. *Communicare* 21(1): 41-60.

Snyman, M.E. & Penzhorn, C. 2004. "An investigation into the production of healthcare information products". In: Birungi, P. & Musoke, G.M. (Eds.). (2004), Papers presented at the 16th Standing Conference of Eastern, Central and Southern African Library and Information Associations, Kampala 5-9 July 2004, Uganda Library Association & National Library of Uganda pp268-290.

Soul Beat Africa. 2005. We shall survive: a music for life project – CD. [Online]. Available: http://www.comminit.com/Africa/materials/ma2005/materials-2425.html Accessed 2006/12/07.

South Africa. 1996. Constitution of the Republic of South Africa Act 108 of 1996. [Online]. Available: http://www.info.gov.za/documents/constitution/1996/a108-96.pdf Accessed 2004/03/31.

Statistics South Africa. 2003. *Census 2001: Census in brief.* [Online]. Available: http://www.statssa.gov.za/census01/HTMLC2001CensusBrief.asp Accessed 2007/02/28.

Statistics South Africa. 2005. Census 2001: Achieving a better life for all – progress between Census '96 and Census 2001. [Online]. Available: http://www.statssa.gov.za/Publications/Report-03-02-16/Report-03-02-16.pdf
Accessed 2007/02/24.

Statistics South Africa. 2006. *Mid-Year population estimates: South Africa* 2006. [Online]. Available:

http://www.statssa.gov.za/publications/P0302/P03022006.pdf Accessed 2007/01/09.



Steinberg, S. 1995. Communication Studies: an Introduction. Cape Town: Juta.

Stilwell, C. 1999. Repackaging information: a review. In: Stilwell, C. Leach, A & Burton, S. 1999. *Knowledge, Information and Development: an African Perspective*. Pietermaritzburg: School of Human and Social Studies pp 41-54.

Struwig, F.W. & Stead, G.B. 2001. *Planning, Designing and Reporting Research*. Cape Town: Maskew Miller Longman.

Sturges, **P & Chimseu**, **G**. 1996. Information Repackaging in Malawi. *African Journal of Library*, *Archives and Information Science* 6(2): 85-93.

Sturges, P & Neill, R. 1998. *The quiet struggle: information & libraries for the people of Africa*. 2nd ed. London: Mansell Publishing Limited.

The Synergy Project. n.d. Putting on the Brakes – preventing HIV Transmission along Truck routes. [Online]. Available: http://www.synergyaids.com/documents/Submoduletruckers.pdf
Accessed 2007/03/01.

Thompson, A.D., Simonson, M.R. & Hargrave, C.P. 1992. *Educational technology – a review of the research*. USA: Association for Educational Communications and Technology.

Torkington, N. 2000. *Community Health Needs in South Africa*. England: Ashgate Publishing Ltd.

Tubbs, S.L. & Moss, S. 1991. *Human Communication*. 6th ed. USA: McGraw-Hill.



UNAIDS. 2006. Report on the global AIDS epidemic 2006. [Online]. Available: http://www.unaids.org/en/HIV_data/2006GlobalReport/default.asp
Accessed 2007/02/27.

UNAIDS & IOM. 2003. Mobile populations and HIV/AIDS in the Southern African region: desk review and bibliography on HIV/AIDS and mobile populations.

[Online] Available: http://www.iom.org.za/Reports/HIV SouthAfrica report.pdf

Accessed: 2006/08/11.

Accessed: 2004/06/07.

UNFPA. 2002. Communication/ Behaviour Change Tools – Programme Briefs No1 – Entertainment-Education. [Online]. Available: http://www.unfpa.org/upload/lib_pub_file/160_filename_bccprogbrief1.pdf
Accessed: 2006/08/21.

Urgoiti, **G.J**. 1991. The Use of Radio and Audiotapes as tools for Primary Health Care Education in the Area of Maternal and Child Health. Unpublished thesis. Cape Town: University of Cape Town.

Vickery, B. & Vickery, A. 1987. *Information Science in theory and practice*. London: Butterworth & Co Ltd.

Wells, J.A. 1994. Readability of HIV/AIDS educational materials: the role of the medium of communication, target audience, and producer characteristics. *Patient Education and Counseling* 24: 249-259.



WHO. 1998. *Health Promotion Glossary*. Geneva: World Health Organisation. [Online]. Available: http://www.who.int/hpr/NPH/docs/hp_glossary_en.pdf Accessed 2007/04/24.

WHO. 2000. Global Initiative for the elimination of avoidable blindness. [Online]. Available: http://www.who.int/inf-pr-2000/en/pr2000-27.html Accessed 2004/06/07.

WIKIPEDIA. 2006. *Fanagalo*. [Online]. Available: http://en.wikipedia.org/wiki/Fanagalo_language_Accessed 2007/03/01.

Williams, F. 1992. *The New Communications*. 3rd ed. Belmont, California: Wadsworth.

Williams, H. 2001. *A Constructivist/ postmodernist definition of literacy*. [Online]. Available: http://tutor.petech.ac.za/educsupport/art_4 Accessed 2007/04/24.

Wilson, T.D. 1997. Information behaviour: an interdisciplinary perspective. *Information Processing & Management* 33(4): 551-572.

World Bank Institute. 2006. Selecting the Right Learning Tools and Technologies. [Online]. Available: http://web.worldbank.org Accessed: 2006/07/20.

Yoder, P.S, Hornik, R. & Chirwa, B.C. 1996. Evaluating the program effects of a radio drama about AIDS in Zambia. *Studies in Family Planning* 27(4): 188-204.

Zarcadoolas, C., Pleasant, A. & Greer, D.S. 2003. Elaborating a Definition of Health Literacy: a Commentary. *Journal of Health Communication* 8: 119-120.

Appendices

φ

_ **Appendix** ⋗ **Brochures** (original texts) used ₹. the study:

Living with HIV and AIDS

Ukuphila neGciwane leSandulela

Ingaviazi yisilo esiphethe izigidi zabantu eNingizimu Afrika.
Ibangelwa yigciwane elibizwa ngokufti yisandulelo-ngoviazi (HFV) elenza kube nzima ukuba umantu ohwe nezinye izilo.
Uma ungotiwane lesandulelan goviazi, ungopila impila entile iminyaka eminingi.
Sobenzisa izindela eziphethile zokuya ocansini:
Sobenzisa izindela eziphethile zokuya ocansini:
Sobenzisa izindela eziphethile zokuya ocansini:
Sobenzisa izindela eziphethile zokuya ocansini obantu. Thosa iwwa olwengeziwe ngezindleria eziphethile zokuya ocansini. Sobenzisa ilihondomu njalo laphe uya coansini. Isobenzisa ilihondomu njalo laphe uya coansini. Isobenzisa ilihondomu njalo laphe uya coansini. Isobenzisa ilihondomu njalo ngovi njalo izindeli yakibi.
Nokakela ingibi yakibi:

"Yidi izinhilobanhiloba zakudia okunempilo.

"Yidi izinhilobanhiloba zakudia okunempila.

- Vivinya umzimba uma ungase ukwazi ukukwenza.
- · Kuyeke ukubhema.

ISIZULU

SESOTHO Ho phela o na le HIV le AIDS

Buphuze koncane utshwala.
 Thola ukuphumula okwanele.
 Thola ukuphumula okwanele.
 Thola ukuphumula okwanele.
 Phuza kuphela imithi oyinikwe abasebenzi basemitholampilo.

Yidla ukudla okunempilo ukuze usize umzimba wakho lwisane nezifo:

- Yidla izithelo ezisesimweni esihle nemifino. Yidla ukudla okusanhlamvu, njengesitambu nesinkwa
- · Gwerna ukudla okungenamsoco, njengenkukhu ethosiwe.
- Phuza amanzi amaningi.
 Gcina indawo yakho yakuphekela nakudlela iblanzekile
- Gcina ukudla endaweni epholile kude nezimpukane.

Yiba nesimo senggondo esigondile ngokubheka isayidi elihle empilweni:

· Zibekele izinjongo empilweni.

- · Zethembe.
- · Bheka isayidi elihle lezinto.
- Zazi lapho unamandla ngakhona nalapho ubuthaka ngakhona.



- Ukusekelwa ungakuthola emndenini, kubangani, izinhlangano ezisekelayo nabeluleki abaqeqeshiwe
- taminingina ezisensevoja nabewieta acaqqesinive.

 Thala olume ulwazi ngezinsizakalo zokuwsele
 abanesandulela ngculazi nabanengaulazi endaweni
 yangakini. Lizikhingo zakuluklea nabuhlela
 ngokuziThandelo kanye neziKhungo eziGeqeshayo,
 eziNikeza ulwazi neziluleka ngeNgculazi
 zikwamanigi amodolobba amakhulu.

Uma kukhona imibuzo onayo ngesandulela-ngculazi nengculazi, ungashayela i-AIDS Helpline yamahhala esebenza amahora angu-24 kule nombolo ethi 0800 012 322.

Kunamanye amapheshana kulolu chungechunge anikeza ulwazi olwengeziwe ngesandulelo-ngculazi, ingculazi nezifa ezithathelana ngocansi (ama-STIs).



Ho ja dijo tse fanang ka phepo e ntle ho ka thusa mmele wa hao ho Iwantsha mafu:

- · E ja dithalwana le meroho e sa tswa kguwa e mengata.
- E ja dithollo, tse jwalo ka setampo le borotho bo sootho. · Qoba ho ja dijo tse se nang molemo mmeleng, tse
- jwalo ka kgoho e hadikilweng. E nwa metsi a mangata.
- Balaka sebaka seo o phehelang ho sona le ho jela ho sona se hlwekile · Boloka dijo sebakeng se phodileng
 - se hole le dintsi. E ba le boikutlo bo tletseng tshepo:

 - · Ipehele dipakane bophelong. · Tlala kgodiseho (itshepe).
 - · Sheba lehlakore le molemo la dintho.
 - · Tseba matla le bofokodi ba hao.

Fumana tshehetso:

- · Tshehetso e ka tswa ho ba lelapa, metswalle, dihlopha tse fanang ka tshehetso le baeletsi ba rupelletsweng.
- Batlisisa ka ditshebeletso tse fanang ka tshehetso ho batho ba nang le HIV le AIDS sebakeng sa lona. Dibaka tse Fanang ka Keletso le Diteko tse sa Lefellweng le Ditsi tse Fanang ka Thupelo le Tihahiso leseding le Keletso mabapi le AIDS di teng ditoropong tse ngata tse kgolo.

Haeba o na le dipotso leha e le dife tse mabapi le HIV le AIDS, o ka letsetsa nomorong ya mahala e sebetsang dihora tse 24 ya AIDS Helpline 0800 012 322. Ho na le dipampitshana tse ding tse letotong lena tse fanang ka tihahiso leseding e eketsehileng tse mabapi le HIV, AIDS le mafu a tshwaetsanwang ka thobalano (diphate).



Language Groups: Gautena, KwaZulu-Natal, Free State

Living with HIV

and AIDS

Ukuphila neGciwane leSandulela Ngculazi neNgculazi

Ho phela o na le HIV le AIDS

AFRIKAANS Hoe om met MIV en VIGS te leef

Developed for the Department of Health: HIV/AIDS and TB Chief Directorate: Tel: (012) 312-0121/2; Fax: (012) 326-2891; Private Bag X828, Pretoria, 0001

 Ikwetlise ha o kgona ho etsa jwalo. . E nwa feela jwala hanyenyane. Phomola haholo.
 Fumana phekolo ka pele ha o kula.

Hlokomela bophelo ba hao:

Tlohela ho tsuba.

E nwa feela meriana eo o e fuwang ke basebetsi ba tsa bophelo.

E ja dijo tsa mefuta e fapaneng le tse fanang ka phepo e ntle.

194

Living with HIV and AIDS

AIDS is a disease that affects millions of South Africans. It is caused by a virus called HIV that makes it difficult for a person to fight off other diseases. If you are infected with HIV, you can lead a normal healthy life for many years. Practise safer sex:

 It is important to prevent passing the infection on to others. Find out about safer sex. Use a condom every time you have sex. This will prevent STIs and re-infection.

Take care of your health:

- · Eat a varied and healthy diet.
- · Get exercise when you are able to.
- Stop smoking.Only drink a little alcohol.
- · Get enough rest.
- · Get early treatment when you are sick.
- · Only take medicines given by health workers.

AFRIKAANS Hoe om met MIV en VIGS te leef

VIGS is 'n siekte, wat miljoene Suid-Afrikaners affekteer. Dit word veroorsaak deur 'n virus genaamd MIV, wat dit vir 'n persoon maeilik maak om ander siektes af te weer. As jy met MIV besmet is, kan jy egter vir baie jare 'n normale, gesonde lewe lei. Beoefen veiliger seks:

 Dit is belangrik om te keer, dat die infeksie nie aan ander oorgedra word nie. Vind uit oor veiliger seks. Gebruik 'n kondoom elke keer as jy seks het. Dit sal SOI's en herbesmetting voorkom. Pas jou gesondheid op:

- · Eet 'n gevarieerde en gesonde dieet.
- · Kry oefening wanneer jy kan.
- · Hou op rook.
- · Drink net 'n bietjie alkohol.
- Kry genoeg rus.
- · Kry vroeë behandeling, as jy siek is.
- Neem slegs die medisynes, wat gesondheidswerkers verskaf.

Eat healthily to help your body fight diseases:

- Eat a lot of fresh fruit and vegetables.
- · Eat whole grains, like samp and brown bread.
- · Avoid junk foods, like fried chicken.
- · Drink lots of water.
- · Keep your cooking and eating area clean.
- · Store food in a cool place away from

Have a positive attitude:

- · Set goals in life.
- · Believe in yourself.

· Drink baie water.

· Look at the positive side of things.

. Eet baie vars vrugte en groente.

. Know your strengths and weaknesses.

Eet gesond, om jou liggaam te help om siektes te

· Vermy gemorskos, soos gebraaide hoender.

· Hou die plekke waar jy kook en eet skoon.

van vlieë.

die lewe

· Glo in jouself.

· Eet volgraankos, soos stampmielies en bruin brood.

· Bêre kos in 'n koel plek, weg

Handhaaf 'n positiewe houding:

· Maak vir jouself doelstellings in

· Sien die positiewe sy van sake.

Ken jou sterk en swak punte.

Get support:

- · Support can come from family, friends, support groups and trained counsellors.
- . Find out more about services that affer HIV and AIDS support in your area. Voluntary Counselling and Testing Sites and AIDS Training, Information

and Counselling Centres are in most big

If you have any questions about HIV and AIDS, you can phone the free 24-hour AIDS Helpline at 0800 012 322.

There are other leaflets in this series that give more information about HIV, AIDS and





- · Ondersteuning kan kom van familie, vriende, ondersteuningsgroepe en opgeleide beraders.
- · Vind meer uit oor dienste, wat MIV- en VIGSondersteuning bied in jou gebied. Daar is vrywillige berading- en toetssentrums en VIGSopleiding-, inligting- en beradingsentrums in die meeste groot stede.

As jy enige vrae oor MIV en VIGS het, kan jy die gratis 24-uur VIGS-hulplyn bel, by 0800 012 322. Daar is ook ander blaadijes in hierdie reeks, wat meer inligting oor MIV, VIGS en SOI's verstrek.



Keep healthy with HIV by exercising regularly.

CONTACT STAMP

www.aidsinfo.co.za

ISIZULU

Ukweluleka ngeSandulela-Ngculazi nangeNaculazi

Ingculazi yisifo esiphethe izigidi zabantu eNingizimu Afrika. Sibangelwa yigciwane elibizwa ngokuthi yi-HIV (isandulela-ngculazi) elenza kube nzima kumuntu ukuba alwe nezinye izifo.

Abantu abanegciwane lesandulela-ngculazi bangase babe nemizwa eminingi njengokwesaba, ukuphelelwa yithemba nolaka. Bangase bakuthole kunzima ukuxoxa nabangane nemindeni yabo. Futhi kusuke kusamele benze izingumo ngempilo yabo. Ukweluleka kungabasiza abantu abanegciwane lesandulela-ngculazi. Abangani namalungu emindeni bangase bakuthale kunzima ukukhuluma nalabo abasondelene nabo abanegciwane lesandulela-ngculazi. Kubalulekile ukuba wonke umuntu athole ithuba lokukhuluma ngale mizwa nomeluleki. Abeluleki bagegeshelwe ukuba balalele, bese benikeza ulwazi olufanele ukuze basize abantu ukuba benze izingumo.

SESOTHO Dikeletso mabapi le HIV le AIDS

AIDS ke lefu le amang batho ba dimilione Afrika Borwa. E bakwa ke vaerase (kokwanahloko) e bitswang HIV, e thatafalletsang motho ho lwantsha mafu a mang. Batho ba nang le HIV ba ka ba le maikutlo a mangata, a jwalo ka tshabo, ho hloka thuso, le kgalefo. Ba ka fumana ho le boima ho bua le metswalle ya bona ekasitana le ba malapa a bona. Hape ba na le digeto tseo ba tshwanetseng ho di etsa ka bophelo ba bona. Dikeletso di ka thusa batho ba nang le HIV. Metswalle le ba malapa ba ka fumana ho le boima ho bua le batho ba amanang haufi le bona ba nang le HIV. Ho bohlokwa hore e mong le e mong a fumane manyetla wa ho bua ka maikutlo ana le moeletsi. Baeletsi ba

rupelletswe ho mamela, le ho fana ka boitsebiso

be nepahetseng be tlang he thusa bathe bana

ho etsa digeto.

Worke umuntu oyohlolelwa igciwane lesandulelongculazi kutanele akhulume nomeluleki ngaphambi kokupa oyohlolwa. Kutanele bazoze ngemiphumela yobo yokuhlolwa kamuva, Abeluleki banikaza ukusekela okuphubekayo, ulwazi kanye neseluleka kubontu abanegiwane lesandulelongculazi, obathandani onahangani comadani abanaani nomndeni.

Kunezinhlangano eziningi ezilulekayo: IziKhungo zokwelulekwa nokuttlotwa ngokuziThandela (amo-Voluntary Counselling and Testing Sites)

(ama-Voluntary Counselling and Testing Sites)
zil/Kungo es/Gaepshayo, zinikeze Ufwaznokwetuleka, ama-AIDS Training, Information
and Counselling Centres (ATICCs)
kwamaningi amadolobha amakhulu
+AIDS Helpline yamahhada essbenza
amahora angu-24 ethi 0800 012 322

- Abasebenzi bezenhlalakahle nezinhlangano ezithile zomphakathi
- Usosesheni (inhlangana) kaZwelonke yaBantu abaneNgculazi, i-National Association of People with AIDS (NAPWA)

- angakwahluleli wena qobo noma isimo okuso:
 - - kufanele akunikeze ulwazi oluyokusiza

Uma kukhona imibuzo onayo ngesandulela-ngculazi, ingculazi, ungashayela i-AIDS Helpline yamahhola esebenza amohora angu-24 kule nombolo ethi 0800 012 322.

- kufanele ahlinzeke indawo ongakhuluma kuvo nave. ninodwa ngasese;

 angakuxoxeli muntu lokho okushovo:
- · abe ngumuntu oqondiswayo, futhi akuvumele ukuba uveze imizwa yakho;
- kufanele akucebise ngezinto ongakhetha kuzo, kodwa angakwenzeli izingumo;

ukuba wenze izinqumo;

kufanele akusekele.

Kunamanye amapheshana kulolu chungechunge anikeza ulwazi olwengeziwe ngesandulela-ngculazi, ingculazi neziho ezithathelwana ngocansi (ama-STIs).

Language Groups: Gauteng, KwaZulu-Natel, Free State

 \neq

and

AIDS

Counselling

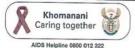
HIV and AIDS Counselling

AFRIKAANS MIV- en VIGS-berading

Ukweluleka ngeSandulela-Ngculazi ISIZULU nangeNgculazi

Dikeletso mabapi le HIV le AIDS





www.aidsinfo.co.za

Motho e mong le e mong ya etsang teko ya HIV o tshwanete ho bua le moeletsi pele o ka etsa teko eo. Ba tshwanela ho buisnan ka dipeleli otsa teko eo himorroo. Boeletsi ba fana ka tshehetso, lihahiso-leseding le keletso ka molgwa o tswelang pele le batho ba nang le HIV, balekane ba bana, metswalle le ba malapa a bana. Ho na le mekgatlo e mengata e fanang ka keletso ena:

- Dibaka tse sa lefellweng tse fanang ka Keletso le Diteko
- Ditsi tsa Thupelo mabapi le AIDS, Tihahiso-leseding le Keletso (AIDS Training, Information and Counselling Centres ATICCs), ditoropong tse ngata tse kgolo
- Nomoro e sebetsang dihara tse 24 ya mahala ya AIDS Helpline 0800 012 322
- Basebeletsi ba setihaba (social workers) le mekgatlo e meng ya metse
- Mokgatlo wa Naha wa Batho ba nang le AIDS (National Association of People with AIDS – NAPWA)

o tshwanela ho ba le sebaka sa ka sephiring moo le o Istimuanela no da le secarda sa ra septiming mos le ka buelang teng;
 ha a tshwanela ho bolella motho e mong sea o mmolellang sona;
 ha a tshwanela ho o ahlola kapa ho ahlola boemo

- boo o leng ho bono; o tshwanetse ho ba le kuthwisiso, mme a o dumelle hore o nishe maikutlo a hao:
- o tshwanetse ho o eletsa ka dikgetho tseo o nang le tsona, empa a se ke a o etsetsa digeto;
- · o tshwanetse ho o neha tlhahiso-leseding bo tlang ho o thusa ho etsa geto;
- · tshwanetse ho o tshehetsa.

Ha o na le dipotso leha e le dife mabapi le HIV le AIDS. o ko letsetsa nomorong ya mahala e sebetsang dihora te 224 ya AIDS Helpline e leng 0800 012 322. Ho na le dipompishana te ding te lelotang lena te fanang ka dipompishana te ding te lelotang lena te fanang ka tihahiso-leseding e eketsehileng mahapi le HIV, AIDS le maha dipompishana te ding te ketsehileng mahapi le HIV, AIDS le maha dipompishana te ding te ketsehileng mahapi le HIV, AIDS le maha dipompishana te ding te ketsehileng mahapi le HIV, AIDS le maha dipompishana te ding te ketsehileng mahapi le HIV, AIDS le mahapi ketsehileng ketsehileng mahapi ketsehileng mahapi ketseh

Developed for the Department of Health: MIV/AIDS and TS Chief Directorore: Tel: (012) 312-0121/2; Fax: (012) 326-3891; Frivate Sag XE28, Pretoria, 0001

HIV and AIDS Counselling

AIDS is a disease that affects millions of South Africans. It is caused by a virus called HIV that makes it difficult for a person to fight off other diseases.

People who are HIV positive may have many feelings like fear, helplessness and anger. They may find it difficult to talk to their friends and family. They also have decisions to make about their lives. Counselling can help HIV-positive people.

Eriends and family members may find it difficult to talk to those who are close to them who are HIV positive. It is important that everyone has a chance to talk about these feelings with a counsellor. Counsellors are trained to listen, and to give the right information to help people make decisions.

AFRIKAANS MIV- en VIGS-bergding

VIGS is 'n siekte, wat miljoene Suid-Afrikaners affekteer. Dit word veroorsaak deur 'n virus genaamd MIV, wat dit vir 'n persoon moeilik maak om ander siektes te beveg.

Mense, wat MIV-positief is, kan baie gevoelens soos vrees, hulpelcosheid en woede ondervind. Dit kan vir hulle moeilik wees, om met hulle vriende en familie is praat. Hulle moet ook besluite oor hul lewens neem. Berading kan MIV-positiewe mense help.

Dit kan vir vriende en familielede moeilik wees, om he praat met diegene wat na aan hulle is en MIV-positief is. Dit is belangrik dat elkeen 'n kans het, om met 'n berader oor hierdie gevoelens te praat. Beraders is opgelei om te luister en om die regte inligting te gee, om mense te help om besluite te neem.

Anyone having an HIV test should speak to a counsellor before the test. They should discuss their test results afterwards. Counsellors give ongoing support, information and advice to HIV-positive people, their partners, friends and fomily.

There are many organisations that give counselling:

- Voluntary Counselling and Testing Sites
- AIDS Training, Information and Counselling Centres
 [ATICCs] in most big towns

Eniglemand, wat 'n MIV-toets ondergaan, behoort voor

die toets met 'n berader te praat. Hulle behoort hulle

voortgesette ondersteuning, inligting en advies aan MIV-positiewe mense, hulle maats, vriende en familie.

 VIGS-opleiding-, inligting- en beradingsentrums (AIDS Training, Information And Counselling Centres, d.w.s. ATICC's)

in die meeste groot stede.

 Die gratis 24-uur VIGS-hulplyn, by 0800 012 322.

Maatskaplike werkers en sommige

gemeenskapsorganisasies.

with AIDS (NAPWA).

National Association of People

toetsuitslae daarna te bespreek. Beraders verleen

Daar is baie organisasies, wat berading gee:

Vrywillige beradings- en toetssentrums.

- The free 24-hour AIDS Helpline at 0800 012 322
- Social workers and some community organisations
- National Association of People with AIDS (NAPWA)

A counsellor:

- · should provide a private place for you to talk;
- must not tell anyone about what you say;
- · should not judge you or your situation;
- should be understanding, and allow you to express your feelings;
- should advise you of your choices, but not make decisions for you;
- should give you information that will help you make decisions:
 - should be supportive.

If you have any questions about HIV and AIDS, you can phone the free 24thour AIDS Helpline at 0800 012 322. There are other leaflets in this series that give more information about HIV, AIDS and STIs.



PRIVATE



- behoort 'n private plek te verskaf, waar julie kan praat;
- moet vir niemand vertel, wat jy sê nie;
- · behoort nie jau of jau situasie te veroordeel nie;
- behoort simpatiek te wees en moet jou toelaat, om jou gevoelens uit te druk;
- behoort vir jou raad te gee oor jou keuses, maar moenie besluite namens jou neem nie;
- behoort aan jou inligting te gee, wat jou sal help om besluite te neem, en
- · behoort ondersteunend te wees.

As jy enige vrae oor MIV en VIGS het, kan jy die grafis 24-uur VIGS-hulplyn bel, by 0800 012 322. Daar is ook ander blaadjies in hierdie reeks, wat meer inligting oor MIV, VIGS en SOI's verskaf.



Counsellors can offer angoing support, information and advice to HIV-positive people, their partners, friends and family.

CONTACT STAMP

www.aidsinfo.co.za



8.2 Appendix B – Interview schedule: Audiocassette/CD evaluation

SOCIO-DEMOGRAPHIC INFORMATION

1) Gender	
0. Male	
1. Female	
2) Age	
10 – 20 years	
20 – 30 years	
30 – 40 years	
40 – 50 years	
50 years +	
	<u> </u>
3) Mother tongue Language	
4) Highest grade passed at school	<u> </u>
0. None	
1. Grade 0-7	
2. Grade 8-11	
3. Grade 12	
4. Degree or Diploma	
5. Honours degree	
If degree or diploma, please	specify
5) Employment	·····
0. Self-employed	
1. Unemployed	
2. Employed	
3. Other	
Specify	
6) Geographical are where you live	
Specify	
7) Type of residential dwelling	······ <u> </u>
0. House	
1. Shack	
2. Flat	
3. Hostel	
4. Other	
Specify	

University of Pretoria etd - Claasen-Veldsman, MM (2007)



8) How	many people live in the same household?		
0. 1. 2. 3.	re do you normally go to for health care?		
	ere do you find/ get health information? at are your main sources of health information?		
• • • • • • • • • • • • • • • • • • • •			
M	Tark the applicable sources with an x and indicate t	he most used source	with a *
	Friends and family members		
	Clinic – health workers and doctors		
	Traditional healers		
	Radio		
	Television		
	Newspapers		
	Magazines		
	Information leaflets and brochures		
	Internet		
	Books		
	ıl monthly income at home		·· <u></u>
	Less than R500		
1.	Between R500 and R999		
2.	Between R1000 and R1999		
	Between R2000 and R4999		
4.	R5000+		



Evaluation of Comprehension of Audiocassettes

After having listened to the audiocassette, please answer the following questions

Living with HIV and AIDS

11) Name the 5 things a person who has HIV can do to live a positive, normal life with HIV and AIDS.
12) What must a person with HIV do to develop a positive attitude in life?
13) Tell me what can people with HIV do to improve their eating habits?
14) Who can support people with HIV?



Evaluation of Comprehension of Audiocassettes

After having listened to the audiocassette, please answer the following questions

HIV and AIDS counselling
15) What is a counsellor?
16) Who should talk to a counsellor?
17) Why must a person who is HIV+ talk to a counsellor?
18) How should a counsellor behave?
19) When must a person go for counselling?
20) Where can a person go for counselling?



General Questions

21) How do you feel about listening to information on an audiocassette?	
	Yes/ No
23) How can this audiocassette be improved? Probe – music, role play, different voices etc	
, ,	
 What would you choose? To read the information in a brochure To listen to the information on a audiocassette To listen to the information on an audiocassette and follow/ read in a brochure 	
25) Will readily available audiocassettes with health information be more useful t than brochures? Ye	es/ No



26) If audiocassettes or cd's with health information where would you expect to find them?	mation were made available to the public,
<u>Prompt</u>	
Clinic	
School	
Church	
Library	
Community centre	
Shopping centre	
Taxi rank	
Other	
Ottlei	
Other: please specify	
27) Do you own an audiocassette or CD play	er? Yes/ No
28) If such cassettes with various topics on h would you be prepared to buy them?	ealth information were readily available, Yes/ No
29) How much would you be prepared to pay	for such a cassette?
R5.00 or less	
Between R5.00 and R10.00	
Between R10 and R20	
Between KTO and K20	
General notes:	
General notes.	
	•••••
ooO	00



8.3 Appendix C – Interview schedule: Brochure evaluation

QUESTIONNAIRE

SOCIO-DEMOGRAPHIC INFORMATION

1) Gender
2) Age (in years)
3) Race
0. Black/African 1. Coloured 2. White 3. Indian
4. Highest standard passed at school
0. None 1. Grade 0-7 2. Grade 8-11 3. Grade 12 4. Degree or Diploma 5. Honours degree If degree, specify
5. Employment
6. Geographic area where you live
7. Type of residential dwelling
8) How many people live in the same household?
9) Where do you go for health care
1. General practitioner

University of Pretoria etd - Claasen-Veldsman, MM (2007)



- 2. Traditional healer
- 3. Hospital
- 4. Other
- 10) Total monthly income.....
 - 0. Less than R500
 - 1. Between R500 and R999
 - 2. Between R1000 and R1 999
 - 3. Between R2000 and R4, 999
 - 4. R5000 and above

EVALUATION OF COMPREHENSION

HIV/AIDS and Counseling Brochure
11) Describe what is happening in the photo on the front page. Who are these people?
12) Do you think they have chosen the right people for the photo?
13) What is a counselor?
14) Why must a person who is HIV positive talk to a counselor?



15) How should a counselor behave?
16) When must a person go for counseling?
17) Where can a person go for counseling
18) What is happening in the picture of a man and a woman?
19) Who do you think is the woman in the last page?
Living with AIDS Brochure
20) What would a game growith HW da to live a game of 1:5-2
20) What must a person with HIV do to live a normal life?



21) What must a person do with HIV to develop a positive attitude towards life?
22) Name all the people who can support a person with HIV
23) What does the picture of ladies on page 4 tell you? Why do you say so? Explain.
24) What does the picture on the front page tell you? Why is there a picture there?
25) What can you say about the foods you see in the 'small' picture on the foods? Why is there a picture on these foods?



EVALUATION OF ATTRACTIVENESS (All brochures)

26) What do you like about these brochures?
27) What don't you like about these brochures?
28) What do you like about the pictures in these brochures?
29) What do you dislike about the pictures in these brochures?



30) Would you prefer photos of real people like these or rather drawings?
31) What do you think about using 4 languages in the same brochure? Would you prefer a brochure with all 4 languages or 1 language per brochure?
32) Why are the different languages printed against different background colors?
EVALUATION OF ACCEPTABILITY (All brochures)
33) For whom were these brochures created? In other words, who are the people who must read these brochures? Explain your answer.
34) Who do you think made these brochures? What kind of person do you imagine him/her to be?



35) Do you think brochures like these are the best way to communicate information about HIV/AIDS? Why?
EVALUATION OF PERSUASION (All brochures)
36) What new information did you gain from these brochures?
37) Did anything you read in any of these brochures change your mind about HIV? Why or why not?



EVALUATION OF COMPLETENESS (All brochures)

38) What else about things discussed in these brochures (AIDS and Counselling / Livir with HIV/AIDS) would you still like to know?	Ŭ
39) Do you think there are enough pictures in these brochures o would you have liked to see more pictures? Motivate your answer.	
	• • •