An investigation into the processes used in the production of printed health messages in South Africa

ABSTRACT

Effective communication processes that include and invite audience participation are crucial for quality health care in a country. In South Africa the importance of this has been an issue of considerable discussion and debate. Critics have pointed out that many of the printed health messages and health communication campaigns that use the printed medium in South Africa are ineffective. To a great extent this failure is ascribed to the lack of audience involvement in the development and production of such messages.

This article reports on an investigation undertaken to examine the extent of this problem. The processes used to develop and produce printed mass media health communication messages in South Africa are investigated by means of an in-depth exploration of the literature discussing and evaluating the production of health messages. This is complemented by an empirical exploration of selected printed messages covering a wide range of issues.

Little evidence was found in the study of the reciprocal nature of communication where producers and communicators of health messages engage in sustained dialogue with their target audiences. The conclusion is drawn that audience participation is not the norm in the production processes of printed mass media health messages in South Africa.

INTRODUCTION

The communication of health information is indicated as a crucial factor in the delivery of high quality health care (Harvey & Fleming, 2003). In less developed countries - where poor health conditions are often the norm - the significant role of health information and the way in which it is communicated are issues of extreme importance (Thuy et al., 2004; Qakisa, 2003). In South Africa the importance – and/or lack of - quality health communication has been an issue of debate and discourse, especially because of the continuing high rate of HIV/AIDS infection in the country (Swanepoel, 2003; Kelly, Parker & Oyosi, 2001; Coulson, 2002).

Maximum health information transfer depends on the processes employed to develop and produce health communication messages. Communication processes designed to match information target audiences' beliefs, social contexts and perceptions are described by many authors as a means of ensuring more successful communication (Mody, 1991; Qakisa, 2003; Janz, Champion & Stretcher, 2002; Thuy et al., 2004).

Yet, in spite of the fact that "3 million adults ...are completely illiterate, ... 5 to 8 million are functionally illiterate ... (and) tens of millions of South Africans (who) are aliterate" (Sisulu, 2004), the printed medium is often preferred in health communication campaigns (Leach, 1999; Snyman, 2001; Morris & Stillwell, 2003) in South Africa. This unjustified reliance on printed media messages in South Africans has, for example, been addressed by Carstens & Snyman (2003) and Collinge (2005) in their reports on the *Beyond Awareness Campaign* and the *Khomanani Campaign* respectively.

In his comprehensive review on printed mass media communication that aims to contain the spread of HIV/AIDS, Swanepoel (2003) postulates that most of the health communication campaigns that use the printed medium are ineffective. One of the problems is caused by the ineffective processes employed to conceptualise and implement these campaigns. Effective communication processes are those that include and invite audience participation. A lack of participation or involvement of the target audience in the process used to develop health messages is often suggested as an important reason for the failure to communicate health messages effectively (Doak, Doak & Root, 1996; Leach, 1999; Coulson, 2002; Quakisa, 2003; and others).

In South Africa adherence to the above-mentioned participatory principles was explicitly stated by Hough, the head of communication at the National Department of Health in 1995. She affirmed the use of a mass media approach - "a relatively well-defined and large audience involving mass media ... often complemented by interpersonal communication" (Rice & Atkins in Hough, 1995). She further stated that health messages that have to increase the knowledge level of people and persuade them to change their attitude and behaviour regarding their own and the community's health, had to be developed in "consideration to the values and norms of the recipients" (Hough, 1995: 11). She cited the Communication By Objectives (CBO) model developed by HP Fourie as a communication campaign planning model. The CBO model comprises four stages: planning, encoding, delivery and feedback (Hough, 1995:12).

Indications are, however, that the processes employed to develop and produce printed mass media health material in South Africa do not follow the theoretical principles of participatory communication. The aim of this article is therefore to determine, in an exploratory manner, the validity of this observation, and to determine whether, and to what extent, audience participatory communication processes are used in mass media health communication in South Africa.

1. PARTICIPATORY HEALTH COMMUNICATION

1.1 Background

It is not a new idea that effective health communication constitutes more than a linear and causal process between a communicator and recipient. In co-orientation models (Bowes, 1997) the communication does not simply flow from communicator to receiver, but communicators engage with receivers to determine and accommodate special needs and context. The key here is the level of understanding or co-orientation among the groups of people involved in the communication process ensuring a shared vision and goals. Originally conceived for interpersonal communication, co-orientation models have been extended to mass communication. The co-orientation model implies a participatory approach to communication.

The Declaration of Alma-Ata, produced at the International Conference on Primary Health Care, already in 1978 advocated the use of participation in health communication. This declaration proclaimed that primary health care should be made universally accessible to individuals "through their full participation" (WHO, 1978). In a similar vein, the WHO Regional Committee for Africa, in 1997 suggested that effective information campaigns should start with the assumption that the people know best what their problems are and what they need in order to cope with them, and that they therefore should be directly involved in setting the agendas in creating and delivering the information messages (WHO, 1997).

Although the participatory approach inherently advocates interpersonal communication (community meetings, demonstrations, etc.), mass media can potentially distribute information effectively to large numbers of people provided that target audiences are carefully researched and consulted in the development and production of the messages that are communicated to them. Mody (1991) argues, for instance, that mass media can play a role in national transformation and development - if they promote "mass participation as a means and as an end" (Mody, 1991:20). Mody proposes that media producers and audiences teach each other through mandatory pre-production and mid-production dialogues. These dialogues with groups as representatives of the larger audience should precede the design of mediated messages for those masses that the media producer cannot see of hear individually. The successful use of mass media in development, and also health communication, thus depends on a sustained dialogue between communicator and audience in which the individual is no longer regarded as a target, but as a critical participant (Jacobson, 1997).

In a participatory communication approach the use of mass media should therefore be subjected to audience involvement from the planning stages of the communication campaign/project through

to its evaluation stage. The realisation that audiences have different ways of thinking, different vocabularies, even different interpretations of drawings and photographs than the experts who initiate the communication programmes, leaves message producers with no choice other than to base messages on information obtained from the audience. Continuously listening to and obtaining feedback from the audience should be built into each step of the programme-development process (Phyllis, Lawrence & Jose, 1997; FHI, 2002).

1.2 Participatory processes

Since meaningful communication depends on a dialogue between communicator and receiver, the everyday lives, practices, attitudes, beliefs and lifestyles of the audience should be reflected in the design of the message. Mass media developers of health messages therefore need to gain knowledge and insight into the lifestyle of the target audience. This implies a formative production process of mass media messages involving the target audience in some of the phases of the process.

Many systemic communication models exist for "audience participatory message design" (Mody, 1991) involving specific and explicit sequential steps for audience participation. Similar steps identified by Mody (1991) in her "Systematic steps of audience involvement in message design" are found in, amongst others, the Communication Wheel of the Centre for Disease Control (Centre for Disease Control, 2001), the Consumer-Based Health Communication Model (Sutton, Balch & Lefebre, 1995) and HEALTHCOM's 5-step methodology (Healthcom, 2003). Although the specific production processes suggested by these models vary, are all based on a participatory approach, starting with an assessment of the audience's needs, realities, and resources, and ending with an evaluation phase to determine feedback of the audience.

In essence, the various steps presented in the four models can be consolidated into four main phases, namely:

- Involve and research the audience. In this phase information about the target audience is collected using both primary and secondary research techniques.
- Determine the objectives. In this phase the content and nature of the message should be set according to the information obtained in the first phase.
- Production phase. In this third phase the message is developed and produced through a
 formative process in which the target audience is consulted by, inter alia, a pre-testing of the
 message.
- Quality assurance. The last phase consists of steps to determine whether the message has
 accomplished its purpose through measuring effective distribution and behaviour change and
 also feedback from the target audience.

2. PARTICIPATORY HEALTH COMMUNICATION IN SOUTH AFRICA

2.1 Introduction

In order to determine whether the processes employed to develop and produce printed health communication messages actually adhered to the principles of participatory communication, a three-tiered research design was followed.

- First, an extended literature survey was conducted to find studies in which the processes used to develop and produce printed health communication messages were described and/or evaluated.
- This was followed by a perusal of reports on the main mass media health communication campaigns in South Africa to determine whether audience participatory processes were being used, and whether the processes used in these campaigns were being evaluated.
- In the last instance an explorative empirical study of restricted scope was conducted.

2.2 Evaluations of communication processes used in the communication of health messages

2.2.1 Birth Registration and Bookmark Campaign

Cassim (2001), in an investigative study, assessed the production process of the Birth Registration and Bookmark Campaign. This is the only study found which explicitly aimed to investigate the process used to develop and produce printed health materials. The Birth Registration and Bookmark Campaign formed part of the Joint Vital Registration Project, a collaborative project of the Departments of Health, Home Affairs, and Statistics South Africa, between 1999 and 2001. The aim of the communication campaign was to inform/educate rural communities about the importance of birth registration.

The joint Vital Registration Project was initiated in 1996. To support this process, two printed products were developed: a poster to be displayed at health clinics, and a bookmark that was to be issued to pregnant women at the clinics. The evaluation of the production of these materials revealed a centralised, top-down communication process that resulted in inaccurate content, the use of inappropriate visuals and language, limited feedback and no impact assessment.

2.2.2 Leaflets of the Beyond Awareness Campaign

The practice of evaluating material by using experts as substitutes for the target audience is criticised in an article by Carstens and Snyman (2003). These authors evaluated the usability of one of the leaflets of the *Beyond Awareness Campaign* initiated by the National AIDS Co-ordinating Committee of South Africa (NACOSA). The leaflet that included text in four languages was specifically tested for comprehensibility. The findings indicated that the printed texts were not well enough comprehended by the respondents to ensure effective communication. No process evaluation was included in their research.

2.2.3 Leaflets produced by the South African Federation for Mental Health

Snyman (2004) used both a checklist compiled from the findings of previous text-focused research in South Africa and also secondary sources as a research instrument to evaluate two leaflets produced by the South African Federation for Mental Health. The results of this evaluation indicated that the selected leaflets were primarily suited to a mainly English-speaking, middle aged, upper class, audience with tertiary education. Although no process evaluation was done, these messages did not match the profile of the indicated target audience. A more participative approach and also audience segmentation are recommended when developing print health messages.

2.2.4 Conclusion

In his study, Swanepoel (2003) also addresses process (and other) problems regarding printed health communication texts in South Africa. He mentions the lack of target audience involvement as a far-reaching problem, especially since such an approach is recommended in Parker, Dalrymple & Durden's 1998 manual for the design of HIV/AIDS campaigns in South Africa (Swanepoel, 2003:43).

The impression exists that there is a distinct scarcity of studies regarding the research processes used to develop and produce printed health messages. Only Cassim's study evaluated the production process, finding it to be a linear, top-down communication process in which a media consultant and agency played a significant role. The two other studies commented on the absence of a formative production process.

2.3 Health communication campaigns

2.3.1 Introduction

The recent health communication scene has been dominated by four "big" health communication campaigns. All these campaigns have adopted a multimedia communication approach (television, radio, printed media and interpersonal/group communication). These four campaigns, jointly funded by the National Department of Health (DoH) and other donors, are the Beyond Awareness Campaign, Soul City, loveLife, and the Khomanani Campaign.

2.3.2 The Beyond Awareness Campaign

One of the overt objectives of the Beyond Awareness Campaign was to "conduct research related to communications and evaluation of various aspects of the campaign" (Hurt, 2000:1). To this end, interviews were conducted with twenty-seven "users" (Hurt, 2000:1) in the Aids Action Office who included media co-ordinators or liaison officers of provincial departments of health, hospitals, district health services, professional health bodies, local AIDS centres and NGOs. Hurts reports that according to these "users", "(T)here was great appreciation for the range of materials available through the *Beyond Awareness Campaign*" and that "Respondents who worked with a range of audiences specifically said that there were materials that met a wide range of needs" (Hurt, 2000:17). No members of the target audiences were ever involved and no process evaluation was undertaken.

2.3.3 loveLife

loveLife uses a combination of print media, outdoor marketing, television, radio, outreach and support programmes to communicate HIV/AIDS awareness to youth in poor communities. loveLife has been evaluated empirically by at least three independent researchers:

- Naidoo (2003) evaluated the impact of loveLife's campaign at the Y-Centre at Orange Farm, but did not evaluate either the printed material or the process separately.
- The aim of a study by Delate (2001) was to determine how a representative sample of the
 target population of loveLife understood the texts of the *His&Hers* billboards. The findings
 show that the communication between text and recipient is not successful. Delate also did not
 evaluate the production process used in loveLife.
- The findings of Diko's (2005) study agree that there was a significant difference between an
 awareness of the loveLife brand and the understanding of the billboards. He found that that
 most of the respondents did not understand the meaning of the message as intended by the
 loveLife producers. He also did not evaluate the processes used in the development and
 production of the messages, but he did mention that the findings implied no participatory
 production process.

2.3.4 Soul City

Soul City's is a comprehensive multimedia campaign which has communicated a variety of health messages since 1994. In-house evaluation is performed regularly and made accessible to the general public. The evaluation reports sometimes refer to process evaluation.

- In the evaluation of Series 2, the importance of formative research is stated: "(e)xtensive consultation, research and testing are crucial to the development of a communications strategy formative research" (Soul City, 2006a).
- The evaluation report of Series 3 also claims in the opening paragraph that "the choice of issues covered and messages developed were done in close consultation with its target audience together with experts in the field" (Soul City, 2006b).
- In the evaluation of series 5, the main purpose of the evaluation was to assess the distribution and usage of the Soul City booklets (Soul City, 2006c). Again the development and production processes were neither identified nor evaluated.

Soul Buddyz is Soul City's multimedia health communication campaign developed for eight to thirteen year-olds on a variety of health-related issues. Although the working document of Soul Buddyz evaluation for Series 1 includes "partnership processes" (Soul City, 2006d), this research category does not feature in the final evaluation report of Series 1 (Soul City, 2006e). The evaluation of the printed booklet for Series 1, *Soul Buddyz Lifeskills Booklet for Grade* 7 refers mostly to the extent of exposure to the printed material (Soul City, 2006e), and makes no specific mention of process evaluation.

2.3.5 Khomanani

The Khomanani Campaign also uses a multimedia approach, as well as various forms of interpersonal communication. It largely follows Soul City's model and emphasises formative research as a basis

"for setting objectives and formulating messages" (Collinge, 2005). Khomanani commissioned three surveys on the campaign, but no evidence was found of process evaluation.

2.3.6 General reports

The first three of the above-mentioned campaigns have further been evaluated in two review studies (Kelly, Parker & Oyosi, 2001; Coulson, 2002). Both of these studies refer to process evaluation only in a cursory manner. Coulson (2002:15) mentions, for example, that "there is yet to be one sustained HIV/AIDS media campaign that promotes pre-tested messages and images". Collinge (2005), in her review of Soul City, loveLife and Khomanani explicitly mentions that Soul City's success is due to formative research "as the foundation of its work" (Collinge, 2005:204) and provides details of the 9 steps they "faithfully" use in the production of their material. No research is, however, conducted in which the application of these steps is investigated.

2.3.7 Conclusion

A minimum of studies discussed above refer to the production processes used of the health messages, but do however indicate a lack of audience participation in the production processes of print health information material.

2.4. Empirical research: an analysis of selected cases

2.4.1 Research approach

The aim of this component of the research was to test the observation made during the two previous phases of the research, namely that the lack of participation, which exists in processes used to develop and produce printed health media messages, is also reflected in practice. A qualitative research approach was the most appropriate approach to follow, since depth and richness of data was required to explore the practice of and attitude towards the design and production processes of printed health communication material.

2.4.2 Selection of cases

Samples of printed health messages were consequently purposefully selected, using critical case sampling. The rationale was that "if it happens there, it can happen anywhere" (Patton 1990:174). Ten printed messages were collected to serve as cases in this study.

Six of the messages were full-colour brochures with text and illustrations/photos. One message was developed as an insert in a magazine, but used in a clinic as a poster; another was a single poster with mainly visual images; yet another was a postcard; and yet another still was distributed as a set of nine posters with a single line of text and a prominent colour illustration. Most of the message producers were national, regional and local government health promotion departments. Other producers were an NGO, a centre for the Study of AIDS at a South African university, a pharmaceutical company, and a health professional council based in South Africa.

Snyman & Penzhorn: An investigation into the processes used in the production of printed health messages in South Africa

2.4.3 Fieldwork

An interview schedule was compiled based on the four phases of audience-participatory message design extracted from the four systemic models of communication as discussed in 1.2. These phases are:

- Involve and research the audience
- · Determine the objectives
- Production
- Quality assurance.

The questions for the interview schedule were formulated to elicit information about the extent to which these four phases were employed in the production of the sampled cases.

The fieldwork was carried out by Master's students in Public Health at a South Africa university. The officials and/or persons directly responsible for the development and production of the selected texts were identified. Open-ended structured interviews were conducted with these key informants. This type of interview was chosen because it allowed the interviewers to probe and provide the respondents the opportunity to express themselves openly. In this way rich data could be collected. Consent for the interviews was obtained. Notes were taken during the interviews, and general comments and quotes were documented to enrich the data.

2.4.4 Findings

The data was analysed by open coding using the four phases contained in the research instrument as broad coding categories. Within these four broad categories some smaller coding frames emerged through the open coding process as described by Berg (1998). The findings are presented according to these four categories and the smaller coding frames.

Involve and research the audience.

- Target audience. Most (7) of the interviewees referred to their target audiences as "the general public", "the whole population" or even "no target audience". These responses, including the one "the staff and students" of the university, imply a heterogeneous target audience. Only two messages indicated a well-defined target audience, e.g. "health care professionals" and "male clients who utilise specific clinics".
- Audience involvement. Only in one of the cases was the audience involved in the development
 of the message. Structured target audience research was done using "exit interviews" of male
 clients who leave the clinic after a visit. Vague references to the use of focus groups or "informal
 discussions" conducted with clients after health education sessions, could not be verified in
 respect of dates and/or methodology. A response indicating "statistics from clinics" as a method
 of audience-participatory research reflects a disturbing ignorance about the concept and role
 of audience participation in health communication.
- Target audience research. In four cases the producers acknowledged that no target audience
 research had been done. One respondent justified this decision by saying, "[B]ecause the
 minimum objective of the message was just to introduce a law that was already in place". The
 notion that the health workers assigned to, or participating in communication programmes

know what the audience wants, is reflected in the following: "[Y]ou know clinic nurses are very good and they know their patients well ... after all, they have been here for a long time ... so a brief on some issues is good enough".

Determine the objectives.

Most of the responses (7) were vague when trying to name the objective of the messages and could not produce specific communication aims. Some indicated multiple message objectives. It was clear that little consideration was given to what exactly they wanted to achieve with these publications.

Production.

• Selection of medium. Roughly half of the respondents indicated that they had to some degree considered and applied a multimedia approach for the dissemination of their message. Mediums used or considered for use included electronic media, radio, drama and road shows, as well as television and newspapers. It was interesting to note that, in general, the interpersonal approach as manifested in workshops, community mediums and demonstrations was a popular approach to combine with the printed medium, which supports the view that the oral approach is well suited to the oral tradition of some of Africa's communities (Leach, 1999; Sturgess & Neill, 1998).

In only one case was the printed medium chosen because of its suitability for at specific target audience. In other cases respondents referred to the printed medium as "easy to disseminate"; "easy to keep"; "able to reach a wide audience"; "reaches those who don't have access to other media"; "allows for 'elaboration'"; "can last"; and, "most effective in reaching illiterate audiences".

- Language. It was clear that language as a common codal system between communicator (message) and receiver, necessary to achieve basic meaning in information dissemination was not aligned to audience profiles. Of the respondents who indicated that their target audience was the "public", only one translated their message in all of the 11 official South African languages. One producer later translated the English message into other African languages when they realised that "not all understand English well". Only in three other messages was the vernacular used.
- Selection of content. With regard to the selection of content, all of the producers, excepting
 one, indicated that content had been decided on by the staff/production team. Although some
 stated that the audience had been involved in finalising the content through "focus groups"
 and "meetings", none of them could verify their claims. The interviewees indicated that that,
 as health professionals, they had enough knowledge to supply the necessary content without
 having to consult the audience.
- The design of the messages. Except for two producers, the NGO and a government department
 where expertise in health promotion, communication and graphic design is available in-house,
 the content was in all other cases was determined by in-house production teams, while the
 layout and graphic design were outsourced to private companies. No evidence was supplied

to indicate that these designers had consulted with or involved the target audience. Only in two cases was a systematic and structured procedure for designing messages in place. In one of the national South African government departments a proposed process did exist, but the process had not been followed in the specific case assessed by the project.

Quality assurance.

- Pre-testing. Six respondents claimed that the material had been pre-tested and five said that some modifications had been made to the materials. When asked about the procedure for pre-testing, only one could describe a methodology and supply a date. Four indicated that pre-testing had not been considered and supplied reasons such as "not sufficient time" and "[T]hese are key messages I want to communicate ... it is a costly exercise".
- Feedback. All felt confident that their messages had been effective, basing their perceptions on factors such as "informal dialogue with students" and "feedback via health workers". Five respondents indicated that measures to determine feedback had been in place. The rest blamed "no training knowledge in monitoring and evaluation" and "limited funding and administrative support ..." for the lack of feedback. Three of these respondents nevertheless felt "positive" and "fairly positive" about the impact of the message. One respondent explained this feeling as follows: "... from what we hear and observe there are a growing number of smoke-free areas and an increasing number of public places with "smoke free" signs". One respondent claimed that "the impact was overwhelming", this despite the fact that the evaluation process could not be described. Other respondents referred to "informal" feedback in discussions with nurses and/or sales force. Two respondents felt that the message made no impact, but couldn't explain why. One acknowledged that she didn't know what the impact was, and one said that impact evaluation is usually done, but that it was in this specific case not yet available.
- Distribution. Clinics, schools and NGOs were named as specific locations for distribution. One respondent indicated that the message was sent to libraries "on request". Distribution also took place during awareness campaigns and community meetings or demonstrations. No distribution channels were mentioned that could reach people who do not visit these places and do not attend workshops. Some respondents were vague about the distribution of the messages as indicated in responses such as "on campus" and "various provinces". The distribution of none of these messages had been monitored although one respondent indicated that monitoring would take place at the end of the year, and another mentioned "a large number of phone calls show that many people are receiving the pamphlet".

3. CONCLUSION

The findings related to the production processes of the selected cases reveal an unmistakeable top-down approach. This approach is often undisguised ("the director assigned the project to the head of the labour relations unit in the human resource section"); sometimes disguised by claims that the origination of the messages is based on community needs identified by health professionals ("felt needs"; "team of experts").

The respondents' own contradictory statements further indicated their ignorance about the realities of their target audiences. Two respondents maintained, for instance, that print is a suitable method for information dissemination because it can reach those who do not have access to other media, not realising that illiteracy is highest in remote and poor rural areas. In none of the cases was use made of the matrix of language use as suggested by the report on *Language guidelines for HIVIAIDS communication in South Africa* commissioned by the HIV/AIDS and STD Directorate for the Department of Health as part of the 1997/98 Beyond Awareness Campaign (Moss, & Segal, 1998).

Most of the respondents did, however, recognise the value of a multimedia approach, and showed an inclination towards small group communication as recommended by Leach (1999) and (Thuy et al., 2004:5).

Pre-testing and impact evaluation, essential for obtaining feedback from the audience, was virtually non-existent. In cases where attempts were made to obtain audience feedback, the process was flawed and lacked reliable methodology. With no feedback, no dialogue exists between communicator and receiver, and no lessons are learnt to improve future messages. This in turn implies that the current top-down health communication approach is likely to continue.

Nine out of the ten health communication messages studied displayed, to a larger or lesser degree, a lack of the application of a systematic process of processes as proposed by theory. The only exception was the message produced by an NGO where an audience-participatory process was followed.

Little evidence was found in this study of the reciprocal nature of communication where communicators engage in sustained dialogues with target audiences. Likewise, little attention was directed towards addressing the problem of the heterogeneous nature of the selected target audience by reverting to audience segmentation as recommended by many authors. Servaes (1995) states, for instance, that the dialogic process may help to demystify the perception that a homogeneous universe exists. This mistaken perception should be one of the first masking myths to go when there is participatory communication.

Regrettably, it seems as if the health communication process used in South Africa got stuck in Berlo's human communication adaptation of the Shannon and Weaver model where "(E)mphasis rest(s) upon receptivity of audience members to a mass media or institutional message or simply being exposed to it" (Bowes, 1997:9).

REFERENCES

- Berg, B.L. (1998). Qualitative research for the Social Sciences. London: Allyn & Bacon.
- Bowes, J.E. (1997). Communication and community development for health information: constructs and models for evaluation. Review prepared for the National Network of Libraries of Medicine. Retrieved 4 July, 2004, from http://www.nap.edu/openbook/0309071925/html/57-96.htm
- 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 en Afrikaans*, 1, (10), 112-136.
- Cassim, M.M. (2001). Assessment of the Birth Registration Poster and Bookmark. Unpublished MPH study. Pretoria: University of Pretoria.
- Collinge, J-A. (2005). Confronting. In: *Health Systems Trust: South African Health Review.* 202-223. Retrieved 9 August, 2006, from http://hst.org.za/publications/682
- Coulson, N. (2002). Developments in the use of mass media at the national level for HIV/AIDS prevention in South Africa. Retrieved 4 April, 2006, from http://www.commit.com/stcoulson/std-5496.html
- Delate, R. (2001). The struggle for meaning. A semiotic analysis of interpretations of loveLife His&Hers billboard campaign. Retrieved 3 February, 2003, from http://www.cadre.org.za
- Diko, T. (2005). *Decoding LoveLife's billboards in a socio-culturally pluralistic South Africa*. Unpublished MA mini-dissertation. Pretoria: University of Pretoria.
- Doak, C.C., Doak, L.G. & Root, J.H. (1996). *Teaching patients with low literacy skills*. Philadelphia, Penn.: J.B. Lippencott .
- FHI (FAMILY HEALTH INTERNATIONAL). (2002). *Developing Materials on HIV/AIDS for low literate audiences*. Washington, D.C.: FHI.
- Harvey, H.D. & Fleming, P. 2003. The readability and audience acceptance of printed health promotion materials used by environmental health departments: international perspectives. *Journal of Environmental Health*, Jan./Feb., 65, (6), 22-27.
- HEALTHCOM. (2003). A toolbox for building health communication capacity: HEALTHCOM's 5-step methodology. Retrieved 3 March, 2004, from http://comminit.com/pmodels/sld-2593.html Hough, M. (1995). Health Communication in South Africa. Meta-Info Bulletin, 5(3).
- Hurt, K. (2000). *Tools for action. An evaluation of the Beyond Awareness Campaign's AIDS Action Office*. Pretoria: HIV/AIDS and STD Directorate, DOH.
- Jacobson, J. (1997). Changing communication strategies for reproductive health and rights: an overview. In: Working group on reproductive health and family planning, Report for the meeting on changing communication strategies for reproductive health and rights 10-11 Dec., Washington DC. New York, N.Y.: Population Council.
- Janz, N.C., Champion, V.L. & Stretcher, V.J. (2002). The Health belief model. In Glanz, K., Romer, B.K. & Lewis, F.C. (Eds) *Health behaviour and health education*. (3rd ed). San Francisco, CA.: Jossey-Bass: 45-66.
- Kelly, K., Parker, W. & Oyosi, S. (2001). *Pathways to action. HIV/AIDS PREVENTION, children and young people in South Africa. A literature review.* Retrieved 20 January, 2003, from http://www.cadre.org.za

- Leach, A. (1999). The provision of information to adults in rural KwaZulu-Natal, South Africa by non-governmental organisations. *Libri*, 49, 71-89.
- Mody, B. (1991). Designing messages for development communication: an audience participation-based approach. New Delhi: Sage.
- Morris, C.D. & Stilwell, C. (2003). Getting the message right: Review guidelines for producing readable print agricultural information materials. *South African Journal for Library and Information Science*, 69(1): 71-83.
- Moss, G. & Segal, K. (1998). Language guidelines for HIV/AIDS communication in South Africa. Pretoria: HIV/AIDS and STD Directorate of the Department of Health. Retrieved 14 August, 2006, from http://www.comminit.com/strategicthinking/st2002/thinking-411.html
- Naidoo, P. (2003). Youth divided: A review of loveLife's Y-Centre in Orange Farm. Johannesburg: Cadre.
- Patoom, M.Q. (1990). *Qualitative evaluation and research methods*. (2nd ed). Newbury Park, CA.: Sage.
- Phyllis, T.P., Lawrence, D.K. & Jose, G.R. (1997). *Health communication lessons from family planning and reproductive health*. Westport, CT: Praeger.
- Qakisa, M.E. (2003). Theories, models and strategies in developing an effective HIV/AIDS campaign in South Africa. *Communicare*, 22(2):45-64.
- Sisulu, E. (2004). *The culture of reading and the book chain: How do we achieve a quantum leap?* (Keynote address). Symposium on Cost of a Culture of Reading, 16 -17 September 2004, Centre of the Book, Cape Town.
- Snyman, M. (2001). Using printed texts to communicate information in the South African development context. *Communicare*, 20, (2), 41-60.
- —. (2004). Using the printed medium to disseminate information about psychiatric disorders. South African Journal of Psychiatry, 7, (4), 15-20.
- SOUL CITY. (2006a). Series 2. Evaluation. Retrieved 14 August, 2006, form http://www.soulcity.org.za/14.04.asp
- —. (2006b). Series 3 Evaluation. Retrieved 14 August, 2006, from http://www.soulcity.org.za/14.04.asp
- —. (2006c). Series 5. Evaluation report. Retrieved 14 August, 2006, from http://www.soulcity.org.za/14.04.asp
- —. (2006d). Soul Buddyz. Evaluation design. Working document. Retrieved 14 August, 2006, from http://www.soulcity.org.za/14.04.asp
- —. (2006e). Soul Buddyz.evaluation design. Retrieved 14 August, 2006, from http://www.soulcity.org.za/14.04.asp
- Sturgess, P. & Neill, R. (1998). *The quiet struggle: information and libraries for the people of Africa*. (2nd ed.) London: Mansell.
- Sutton, S.M., Balch, G.I. & Lefebre, R.C. (1995). Strategic questions for consumer-based health communications. *Public Health Reports*, Nov/Dec, 110, (6), 725-729.
- Swanepoel, P. (2003). Die oneffektiwiteit van MIV/vigsvoorligtingsveldtogte en tekste in Suid-Afrika: normatiewe raamwerke, probleme en riglyne vir oplossings. *Tydskrif vir Nederlands en Afrikaans*, 10, (1), 5-51.

Snyman & Penzhorn: An investigation into the processes used in the production of printed health messages in South Africa

- Thuy, D.O., Llanos-Savalaga, F., Huong, M.T.N., Poppe, P., Tawfik, J. & Church-Balin, C. (2004). The role of health communication in achieving global TB control goals. Lessons learnt from Peru, Vietnam and beyond. *Health Communication Insight Summary*. Baltimore: Health Communication Partnership, (based at) Johns Hopkins Bloomberg School of Public Health, Centre for Communication Programmes.
- WHO (WORLD HEALTH ORGANISATION). (1978). *Declaration of Alma-Ata*. International Conference on Primary Health Care. Retrieved 12 September, 1978, from http://www.euro.who.int/aboutwho/policy.20010827_1
- —. (1997). A new strategy to empower people in Africa. World Health, 50, (6), 4-6.