

RETHINKING THE APPROPRIATENESS OF HEALTH EDUCATION MESSAGES: PROBLEMS, PRINCIPLES AND GUIDELINES



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ABSTRACT

This article is based on research to design a model for appropriate health education messages in a multi-cultural developing community. The Ph.D study was completed at the University of Stellenbosch in 1998.

Nowadays the media are playing an increasingly powerful role at all levels of health education in developing and developed countries alike. The inappropriateness of media messages, though, is a major contributing factor in the fluctuating effectiveness of health education programs. There are a number of variables such as cultural relevancy and familiarity of medical terminology used that determine the appropriateness of health education messages. Messages that are culturally inappropriate could lose its credibility and could even result in polarising the health beliefs of different communities. It could also reinforce risk behaviour, thereby making it most difficult to accomplish disease prevention and health promotion objectives. This article presents a theoretical perspective in this regard. It leads to the HAMSOC model that indicates key principles for improving the appropriateness of health education messages in a multi-cultural developing community. Practical guidelines and examples are given regarding the modification of inappropriate messages within this particular context.

OPSOMMING

Die media vervul deesdae 'n toenemend kragtige rol op alle vlakke van gesondheidsopvoeding in beide ontwikkelde en ontwikkelende lande. Ten spyte hiervan is die ontoepaslikheid van mediaboodskappe egter 'n belangrike bydraende faktor in die wisselende sukses van gesondheidsopvoedingprogramme. Daar is 'n aantal veranderlikes wat die toepaslikheid van boodskappe vir gesondheidsopvoeding bepaal, byvoorbeeld kulturele relevansie en bekendheid met mediese terminologie wat gebruik word. Boodskappe wat kultureel ontoepaslik is, verloor geloofwaardigheid en sou selfs tot die polarisasie van gesondheidsoortuigings by verskillende gemeenskappe kon lei. Dit sou ook risikogedrag kon versterk wat die bereiking van doelwitte rondom siektevoorkoming en gesondheidsbevordering bemoeilik. Hierdie artikel stel 'n teoretiese perspektief in dié verband. Dit lei tot die HAMSOC model wat sleutelbeginsels aantoon om die toe-paslikheid van boodskappe vir gesondheidsopvoeding binne 'n multikulturele ontwikkelende gemeenskap te verbeter. Praktiese riglyne en voorbeelde word gegee in verband met die modifikasie van ontoepaslike boodskappe in hierdie spesifieke konteks.

INTRODUCTION AND BACKGROUND

Over the past two decades different channels of communication, particularly the mass media, have made an increasingly powerful impact on public awareness and knowledge about health and illness. Owing to the frequent coverage of AIDS related aspects in the mass media, Berridge (1991:179) refers to AIDS as the first "media disease". Communication is also at the heart of health promotion, because people are involved in the process of giving and receiving information, learning from each other and empowering others in order to make informed decisions. Consequently, there is a growing awareness amongst health professionals that health problems nowadays cannot be dealt with effectively without considering the role of communication in general, and media in particular, in the development as well as prevention of diseases (Kickbush, 1996:259; Parish, 1999:44). The South African health authorities support this viewpoint. In 1994 the Minister of Health

made the following public statement: "We need the media. The concepts of promotion and prevention needs mass communication. We should develop a dynamic working relationship with the media. They need to make news; I need to get messages across" (Robbins, 1994:3).

While modern technologies play an increasingly powerful role in the dissemination of health information, there are still specific problems in health communication that need urgent attention. Many health educators in developing countries such as South Africa, lack the necessary skills to communicate and use media effectively (Hugo, 1996:80; Butler, 1999:14). In addition, the media used in health education programs are often inappropriate, for a number of reasons. This includes inappropriate technology for delivery of health education messages (Robson, 1989:65), and the presentation of information in communication codes that are not suitable on the basis of visual literacy (Baggaley, 1989:99).

It seems that there is still too much emphasis on the role of technology as such, and too little emphasis on information design. Various experts such as Atkin and Arkin (1990), Tones (1991), Livingston (1993); Hubley (1994), as well as Maibach and Parrott (1995) agree that the inappropriateness of media messages play a significant role in the fluctuating effectiveness of health education programs. Woodcock, for example, contributed adolescents' ability to recall specific teaching methods in sex education in a specific case to the inappropriateness of educational videos (1992:517). Levin in turn (1996:282), points out that most health promotion materials are written at a reading level too difficult for the majority of the American population to comprehend. What we tend to overlook, are the potential negative effects of inaccurate or misleading information, in the sense that it could promote rather than change or prevent risk behavior. Therefore, Wallack (1990:147) warns health communicators and health educators against inappropriate messages as a source of "anti-health education". The following remark in a field study to assess the effects of mass media campaigns about eating habits in the United Kingdom doesn't require any explanation: "There's such a lot of nonsense spoken about food, particularly on the electronic media, so I tend to ignore it" (Goode *et al.* 1996:292). In South Africa the same pattern occurs. The controversial musical play, *Sarafina II*, is a good example. This particular play indeed met the requirements of entertainment in using popular local methods of health education (by way of music and theatre). On the other hand, it seemed to fail as a public AIDS education tool, thus having only limited value according to the "edutainment" formula. Also in this case, the feedback from a member of the audience proves that we still have a lot to learn. After seeing the play a (HIV positive) respondent made the following comment: "Tot pouse toe het die stuk my net geleer dat, as jy uitvind jy het Vigs, moet jy kerk toe gaan en op God vertrou" (Snyman, 1995:20).

It is important to note that one cannot take it for granted that media effects on the wide range of audiences involved in health education and health communication are always positive (in terms of promoting healthy lifestyles). Inappropriate, inaccurate and misleading messages could reinforce health risk behaviour, rather than reducing or preventing it. Authors such as Graeff *et al.* (1993) as well as Maibach and Parrott (1995) make it quite clear that inappropriate media messages could have serious effects on the lifestyle and health behaviour of individuals. Baggaley performed extensive research on smoking prevention and AIDS TV campaigns in a number of countries during the eighties. His studies showed that inappropriate messages (by putting too little emphasis on educational aspects) could result in polarising public beliefs regarding health and diseases (Baggaley, 1986:43; 1988:7). McBean (1996:14) reports that some mass media messages in the Caribbean region actually promote, rather than change teenagers' behaviour that could increase their risk of AIDS. He points out that television and film still tell the public that adults enjoy free (unprotected) sex, that alcohol is the solution to solving sexual conflicts and that those who feel depressed often resort to desperate measures, including violence or drug abuse. These two examples hopefully make us

more aware of the potential undesired effects of inappropriate media messages in society.

PROBLEM STATEMENT AND OBJECTIVE

One of the critical influencing factors that has not received sufficient attention when it comes to appropriate messages in health education is socio-cultural sensitivity. According to Webb (1994:207) AIDS messages in the United Kingdom are often inappropriate for specific ethnic population groups. In one case the message has offended black communities, leaving many groups angry and not prepared to participate in HIV/AIDS education programs. Is this perhaps the reason why AIDS education campaigns in South Africa, like many other health education interventions up to this point have had much less impact than expected? In view of this the following research question was formulated: How could we improve the appropriateness of media messages for health education within a culturally diverse society? What is currently missing is a model that clearly specifies the key principles and factors that determine the appropriateness of health education media messages within this particular context. We need a better understanding of the relationship between health communication, appropriate technology, health education and cultural issues of health and well-being. According to Ram (1989:9), the impact of modern information technologies in public health promotion could be increased if a functional context exists for making medical information user-friendly. He explains as follows: "Health is an abstract idea that is much better understood in the context of persons and places. Medical knowledge needs to be put in simple and understandable language backed up by appropriate technology". The proposed model is based on the hypothesis that message appropriateness for health education in a multi-cultural society could be improved by applying the principles and strategies of health education, appropriate media and technology, as well as socio-cultural sensitivity respectively. But we must go beyond mere theoretical discourse. If possible, such a model should include practical guidelines for improving the design of health learning materials and health education messages. The objective of this study was to generate a model that meets these requirements.

THE HAMSOC MODEL

Basic concept and structure

From a brief analysis of the literature one can conclude that there is some or other link between primary health care (PHC), health education, health communication and media use. PHC refers to essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community can afford. PHC includes at least education concerning prevailing health problems and the methods of preventing and controlling them (Brink, 1989:1346). To Werner and Bower (1982:15-1) there is no doubt that such a link does exist. The authors discuss basic

principles and examples of appropriate and inappropriate technology as well as low-cost materials for health education in developing communities. Hubley (1994) also covers various appropriate media for health education in developing countries in detail. Scholars of development communication (Fuglesang, 1973; McAnany, 1980; Marchant, 1988) refer to the IEC (Information, Education, Communication) strategy applied to facilitate community development activities in Third World countries. Since public health education could be viewed as part of community development activities, the IEC concept is also found in health communication in developing countries (Hubley, 1994:17; Temu, 1997:18).

From a structural viewpoint the HAMSOC model is based on three cornerstones, namely Health Education, Appropriate Media and Technology, and Socio-cultural sensitivity (HAMSOC is the acronym for these three cornerstones). It is argued that the appropriateness of health education messages in this particular context is the result of the interaction between the three primary components, as illustrated by the overlapping areas in figure 1. In other words, each individual cornerstone has an influence on the other two components. The centre area of the figure where the three cornerstones overlap, symbolically indicates that the ideal strategy is to put equal emphasis on all three primary components to achieve the best results. Each of these cornerstones covers a number of theoretical issues that cannot be discussed here in depth. For example, the selection of relevant content and the

most suitable methods of delivery thereof spring to mind regarding health education, while appropriate media use includes the selection of a suitable medium (or media) to achieve stated objectives and long term outcomes.

In order to go beyond the surface of the basic structure, figure 2 presents a more detailed picture of the multi-dimensional phenomenon we are dealing with. It shows a number of important features. Apart from the three cornerstones (identified in figure 1) figure 2 indicates the primary outcome, eight generic principles for effective media use, as well as three secondary components, namely Communication, Media Acculturation, and the Context respectively. The primary outcome is the improved health and wellbeing of:

- individuals (eg. a diabetic patient, alcoholic, teenager with eating disorders, HIV or TB infected patient, etc.);
- families or particular groups (eg. drug addicts, teenagers and adolescents with unsafe sexual habits, mothers at a neonatal care clinic, etc.); and
- certain communities in need of health education (eg. communities with a high incidence of TB, HIV infection and child malnutrition).

Figure 1: Cornerstones of appropriate health Education messages

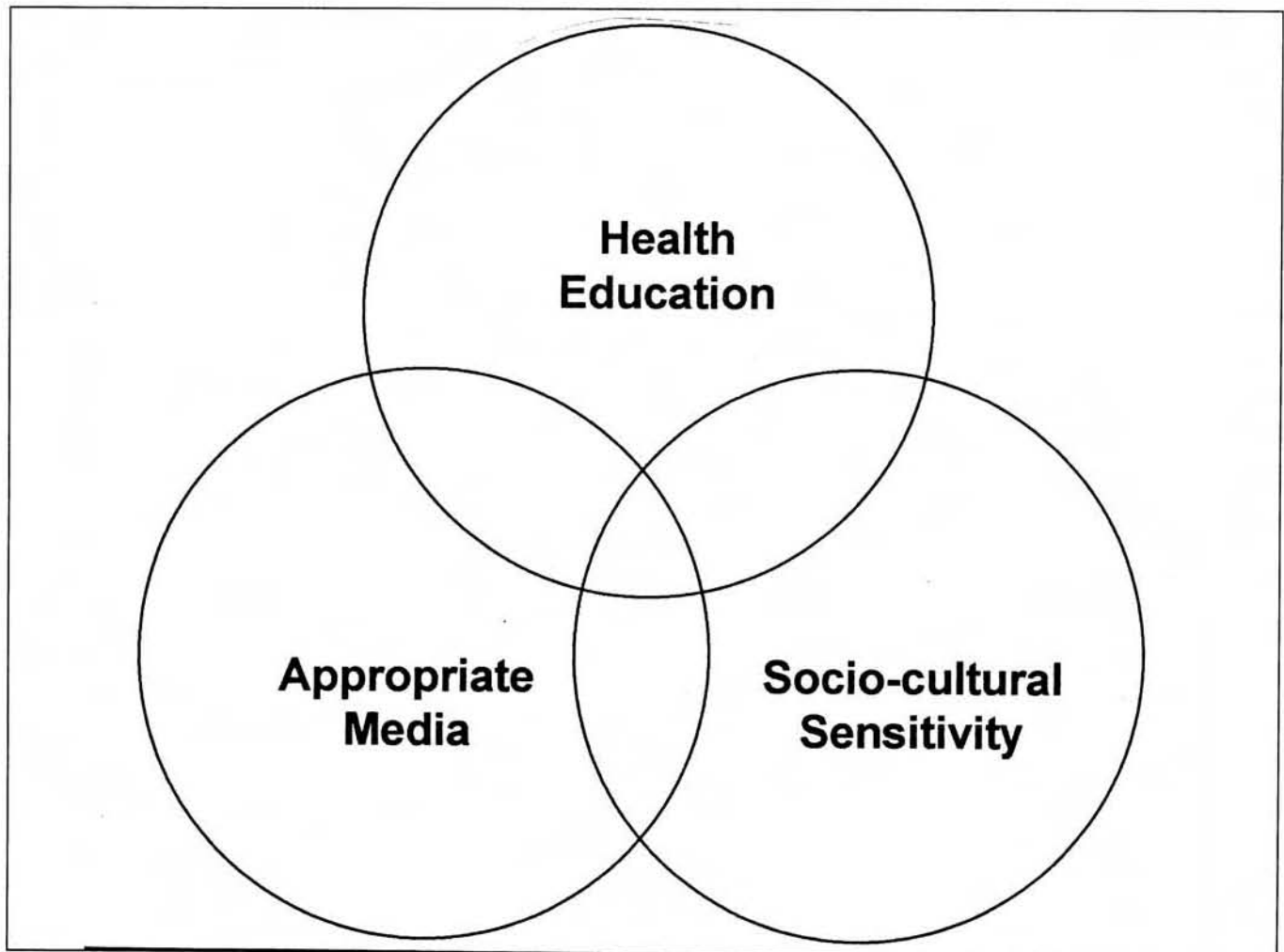
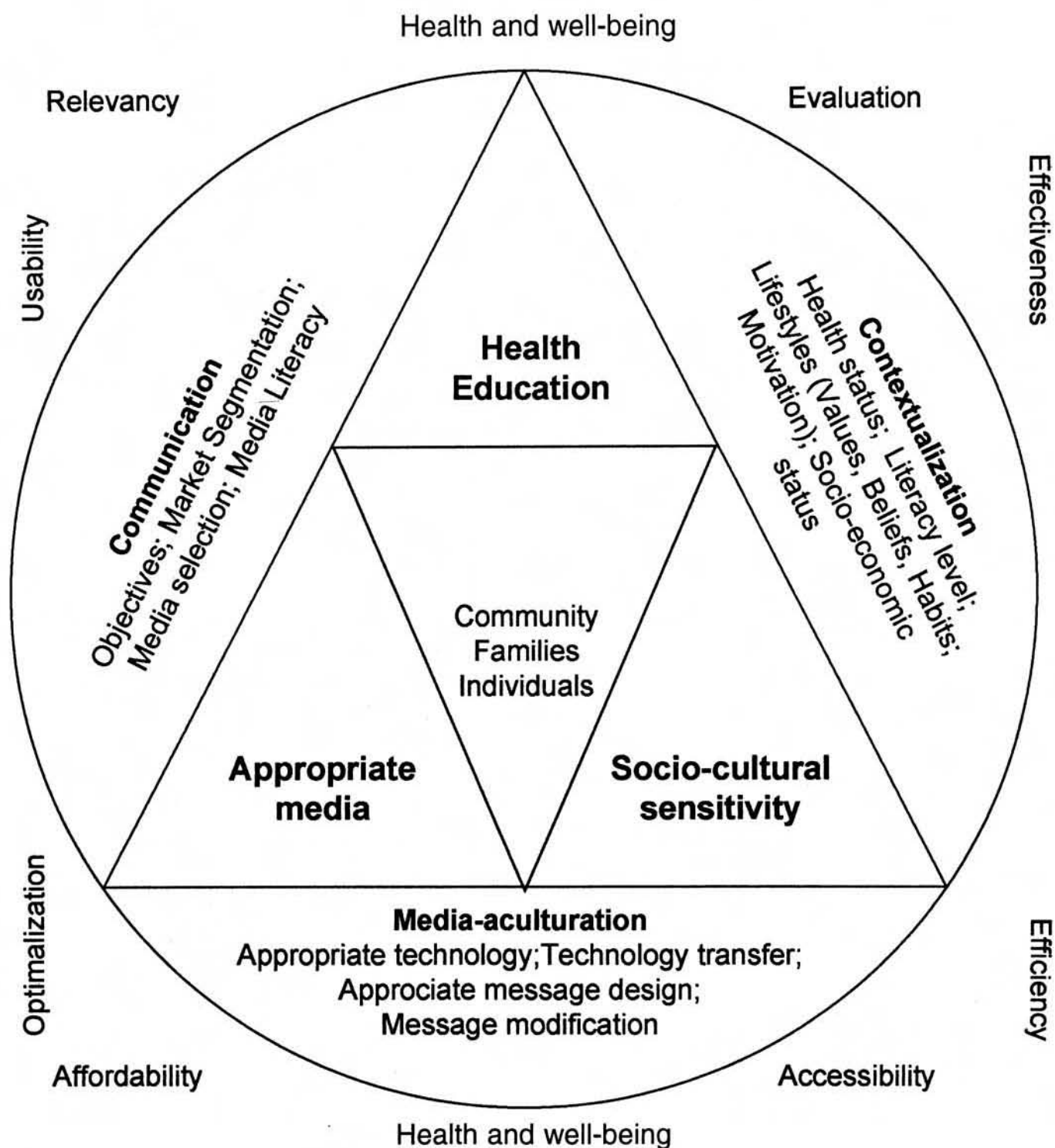


Figure 2: The HAMSOC model for appropriate health education messages in developing communities



The different contributing components have varying levels of importance. Therefore, the primary outcome (health and well-being) lies at the first (widest/most general) level. The second level comprises eight principles for effective media use, namely effectiveness, efficiency, evaluation, appropriateness, etc. The third (and most important) level includes the three cornerstones, three secondary components and the major target groups.

We must point out that while some principles and components are more important than others, none of the indicated factors could be ignored. In other words, all of them play some or other role in message appropriateness. At the same time, the three primary components are equally important, because the model is based on a holistic approach. This means, for example, that if the principles of one of the cornerstones are ignored you will very likely end up with less

appropriate media messages with a reduced impact on health education and health promotion outcomes. Likewise, the three secondary components, namely Communication, Media Acculturation and Socio-cultural context have the same level of importance.

The particular positions of these secondary components in relation to the cornerstones illustrate that they form the links between the primary components. One could argue that each secondary component only has a meaning when viewed in relation to the adjacent primary components. In other words, Health communication forms the link between Health education and Appropriate media and technology. Similarly, Contextual aspects form the link between Health education and Socio-cultural sensitivity. Likewise, Media acculturation is the link between Appropriate media and technology, and Socio-cultural sensitivity. In trying to get a better understanding of the interactive relationship between the primary components, we can take a closer look at the interaction between Appropriate media and technology, with Socio-cultural sensitivity. When one considers the diversely different mass communication infrastructures and availability of educational technology in developed countries compared to less developed countries, decisions regarding appropriate media and technology are quite important. Whether we use high tech or low tech or no tech will be determined by educational, economic and logistical factors such as the learning outcomes of a program, as well as the usability, availability, accessibility, and affordability of different information delivery tools. From a different perspective the appropriateness of media and technology is also influenced by different socio-cultural factors regarding your target audience. These include their language of communication, educational level, health beliefs, habits and familiarity with the media you propose to use. In the process of media acculturation one should at least pay attention to the potential barriers in technology transfer and the modification of inappropriate messages (text, graphics, photos, etc.) to make it more suitable for a particular audience. This requires, inter alia, the identification of the most suitable medium of communication in a particular situation by way of media selection. It also requires proper attention to consideration of socio-cultural issues that could play a role in message modification (eg. the level of visual literacy of the audience).

The same applies to the communication dimension and contextual dimension. For example, you can only deal with communication aspects effectively if you consider the principles and processes of health education fully, on the one hand, and the use of appropriate media and technology, on the other hand. In simple terms, the primary components act as the cornerstones for the secondary dimensions, while the secondary dimensions indicate the main variables that should be considered as the result of the interaction between the primary components.

One is aware that a graphic diagram falls short in giving a full picture of reality. It must be emphasised that message appropriateness, like communication, is definitely not a

static phenomenon with fixed highly controllable variables. In fact, message appropriateness is a relative phenomenon and therefore a certain message is always appropriate only for a specific need, audience and situation. In other words, the same medium or message could be highly suitable for a certain audience, but completely inappropriate for another. In view of this, some of the key principles of the HAMSOC model need further clarification and discussion.

Principles

It's the message (in the medium) that counts

We cannot contest the fact that media can make both communication and learning more stimulating and effective. However, all health educators should be reminded that the effectiveness of media is firstly determined by how you use it. In this regard Tones (1993:135) points out that some health workers still regard the modern mass media as "magic bullets" in the fight against diseases like HIV/AIDS. The principle is that media should always form an integrated part of educational programs as a whole, instead of being used as crutches to prop up mediocre teaching (Green & Simons-Morton, 1984:296). Another important implication is that the emphasis should be on how you formulate your information (by using different communication codes), rather than on technological gadgets. In the late seventies Salomon (1976:26) concluded that technologies of transmission per se make hardly any difference in learning; it is the symbolic code (text, pictures, sound, etc.) into which a message is dressed that affects learning. The point is that we must pay much more attention to specific media aspects in communicating health education messages.

An audience-centred approach

Probably the biggest lesson health communication practitioners have learnt over the last decade is that the effectiveness and impact of media messages in health communication depends in the first instance on a clear audience-oriented approach (Maibach & Parrott, 1995:67). A decade ago health education programs often fell short in this respect, as Wellings (1987:146) reported about weak points in some public AIDS prevention campaigns: "Blanket messages aimed at a homogeneous at-risk population will be inappropriate because, for the purpose of preventing Aids, such a population does not exist". This means that we must focus on well defined targets (outcomes as well as audiences). This requires proper target differentiation in the planning phase of a health education program or mass media campaign, before focussing on the needs and circumstances of a particular (single) target group. A number of academic scholars and health education practitioners support this particular viewpoint. Berridge (1991:179), for example, has concluded that the analysis and formulation of guidelines regarding media effects in health education should start with a study of "differential (media) effects on different groups of society". One finds that an increasing number of developing countries have taken this to heart, as illustrated by specific criteria and requirements for planning public mass media communication campaigns (Aghi & Carnegie, 1996:24; Temu, 1997:18;

Stanton, 1997:39).

In South Africa the advertising industry, as participants in the design of health education messages via the mass media, also recognises the importance of market segmentation. This is not done along cultural-ethnic lines anymore, but on the basis of media user trends. Green and Lascaris (1988:66) summarise the approach nowadays: "Our burgeoning, multi-ethnic population is all set to outgrow and overpower the old racial barriers. But ironically, in a media sense audiences will be more divided than ever before. The difference will be that in future, segregation will not normally be purely along racial lines. We foresee a continuing trend toward narrow-casting (as opposed to broad-casting)". For this reason the SABC has taken specific steps towards making both television and radio programs more relevant to the needs and cultural background of different communities. Consequently, a number of (local) community radio stations all over South Africa were introduced to complement programs of general nature. The same principle was applied in the restructuring of the television channels by the SABC. The program "Cape at Six" which features program content of events in and around the Cape Peninsula is a typical example of the results of the target/audience differentiated approach.

Sensitivity to socio-cultural variables

The emphasis on target differentiation would most likely lead to an increased sensitivity to socio-cultural issues in health education and communication. It is important to note that Whitehead (1992:154) describes the insufficient attention to socio-cultural factors as the "missing link" in health education. She argues that the successful breaking down of barriers of misunderstanding in health communication depends primarily on sensitivity to different socio-cultural aspects of health, illness and disease. As far as media is concerned, authors in both developed and developing countries since the late eighties have emphasised that health learning materials should meet the requirement of socio-cultural sensitivity (Mares *et al.* 1984:64; Bhopal & Donaldson, 1988:139; Folmer *et al.* 1992:45; Livingston, 1993:189). Socio-cultural sensitivity, within this particular context, refers to a clear awareness of the role of different socio-cultural variables in the acceptability of health messages and learning materials for specific audiences, as well as showing respect for the differences in life values, habits and beliefs of individuals. It ties up with strategies for analysis of underlying factors (eg. personal lifestyle) that should be considered in the planning of disease prevention interventions on the primordial level (Beaglehole *et al.* 1990:80).

Appropriate media and technology

Most governments are aware of the widening gap between the technological rich (the "haves") and technological poor countries (the "have nots"). This has forced developing countries to adapt certain available resources imported from the wealthy nations to fit local needs and socio-economic conditions according to the principles of appropriate technology. This practice is found, *inter alia*, at all levels of formal education, including medical education (Michel, 1987:125; Maskaliunas *et al.* 1995:5). The development of appropriate

technology is also common practice in health education. Under the general theme "New horizons in health" delegates at the XVIth World Conference on Health Education and Health Promotion held in Puerto Rico in 1998, identified the development of appropriate information and communication technologies for health education as a key challenge for the future (Arroyo, 1998:51). Within the context of health education appropriate technology is a fashionable way to say that you do things in a low-cost, effective way that local people can manage and control themselves (Werner & Bower, 1987:15-1). The term 'appropriate media' refers to content, communication codes and media formats that fit the literacy level as well as cultural and socio-economic background of a particular target audience in achieving specific health communication objectives. The South African wind-up radio is a good example of appropriate technology that fits the needs and conditions of developing countries. This radio operates for about forty minutes by way of a simple wind-up generating system. The Cinema Donkey project, where health education films are transported over heavy terrain in rural areas of North-west-Kenya by means of a donkey (Henrich, 1989:10), is another excellent example of appropriate media/technology where poverty prevents health educators from using more sophisticated modes of communication. On a less sophisticated level, developing countries have a long tradition of using so-called "traditional" or "popular" media such as various forms of puppetry, music, songs, flannel boards and village theatre for community health education (Hubley, 1994:231). A unique feature of these methods of health education is that people from local communities produce them. They use materials that are locally available. At the other end of the scale, appropriate technology for health education could also include more sophisticated modes of communication such as the Internet-web, and satellite television (Fodor, 1996:5; Skinner, 1997:23). According to Gebreel and Butt (1997:33) health education by means of simple low tech media can be as effective as high tech communication media.

Practical guidelines

As stated before, a key objective of the model presented here is to set guidelines for improving the appropriateness of media messages in health education. The value of the model would be much more evident if some practical guidelines are included here, for example on how to modify pictures that are inappropriate for a particular audience. A detailed discussion about making media messages more appropriate for health education in African context was published elsewhere (Hugo, 1998:87). Therefore, only general guidelines are formulated here. As a rule of thumb, all message design processes in health education should give equal emphasis to the principles of health education, appropriate media/technology and socio-cultural sensitivity. In simple terms, it means that each and every message is always viewed within the broader context of a specific situation. Socio-cultural sensitivity should be reflected in media use and health learning materials design in at least the following ways:

- An increased awareness that health communication always takes place against a certain socio-cultural background that affect the appropriateness of media and technology.

When media messages in health education and communication reflect socio-cultural sensitivity, the audience is more likely to perceive the information as relevant to their needs and preferences. This in turn, could have a positive effect on the impact and final outcome of a program or media campaign. This was illustrated in a number of studies over the past decade (Harris, 1988:104; Cella, 1992:377; Rossiter, 1993:316; Brown *et al.* 1996:117).

- An increased awareness that the meaning of communication codes could differ dramatically across different cultures.

In 1990 an outdoor advertisement by the South African Breweries at a public bus terminal in a rural township depicted an Indian football player enjoying a beer. Later inhabitants from the local township pointed out the inappropriateness of this poster - the goalkeeper was a Muslim, but as we know, Muslims don't take alcohol (Green & Lascaris, 1990:118). On the topic of AIDS, Hill and Murphy (1992:152) report that aboriginal groups in Australia had misconstrued the meaning of the word "condoms" as referring to the local fruit "quandongs". The local community believed that eating this particular fruit would confer protection against AIDS.

- The use of high tech and low tech communication tools in combination with interpersonal communication.

No single non-human medium of instruction or information technology tool, in itself, can educate or bring about change of health behaviour. Research has shown that media use has the biggest impact in health education when it is combined with different forms of personal interaction (Flay *et al.* 1986:129; McBean, 1996:13).

- Analysis of the effects and the potential barriers regarding the use of specific codes of communication with different audiences and in different health education settings.

There is a range of communication styles in which health education messages can be dressed. Some audiences are more likely to respond favourably to humour, while in other cases you should rather use a fear arousal or emotional approach. Hard lessons have also been learnt in the field of technology and health learning materials transfer across international borders. Putting your information on pamphlets and posters only when the majority of the audience is illiterate, is completely inappropriate. In this case, radio or television is much more suitable, because the audience does not have to read the information. During the late eighties Robson (1989:65), for example, identified several technical weak points in audio-visual materials imported from the USA for patient education at the Baragwanath hospital. The materials were not originally designed for South African audiences, the language was inappropriate, and some visual images (eg. of locations where recordings had been done) in video material were unfamiliar to local audiences.

- The design of health learning materials and messages that reflect the cultural diversity of society within an audience-centred approach.

On a practical level the implication is that you should mod-

ify inappropriate message designs (text, visuals, etc.) to make it more suitable for your target audience. There is a range of visual communication conventions for low-literate audiences in developing countries that should be followed. It includes the use or non-use of specific graphic symbols (eg. mathematical symbols to indicate "correct" or "incorrect"), graphic techniques to depict depth and relative size of objects, as well as the use of colours with specific symbolic meanings (Ely, 1989; Linney, 1977). As far as verbal communication is concerned a most interesting trend in some communities of South Africa is called the "code mixing" and "code switching" phenomenon. This refers to the mixing of terms from different local languages and alternating use of different languages by bilingual groups. Typical examples of code mixing are "Local is lekker" and "We'll sommer have a quick indaba to discuss the matter" (Kaschula & Anthonissen, 1995:73). What would be the effect of using this style in communicating health messages to certain local audiences such as teenagers? This strategy has been applied in several projects to improve the appropriateness of health learning materials for specific audiences.

- Participation by the target audience in the design of media campaigns for health education and health learning materials for patient education.

Linney (1977) and others (Austin, 1995:130) emphasise the importance of involving members of the proposed audience in the process of designing health learning materials. There are various excellent examples from developing countries to illustrate the application of this strategy in health education materials development. Recent cases include the design of an educational card game about child safety in South Africa (Hugo, 1994:145), youth health campaigns in Latin America (Cardaci, 1997:20), a program about youth substance abuse in the Pacific (Stanton, 1997:39), and AIDS education programs for school children in Zimbabwe (O'Donoghue, 1997:7). Another case was a public health education project via broadcast radio in Mozambique (Bonati, 1997:8). In this case a group of children participated in the production of a series of radio programs. It gave the planners and producers the opportunity to get direct feedback from the children on what they really wanted and how they perceived health issues.

- Pre-testing of prototype learning materials and messages as part of formative assessment in the media production process.

The main objective of formative assessment in the media production process is to identify specific aspects that should be modified to improve the level of appropriateness. There is probably no better way of getting the "real facts" on whether your messages and materials are suitable or not than through feedback from target populations themselves. Consequently, authors such as Dowling (1991) and Folmer *et al.* (1992) emphasise the important role of formative assessment in health learning materials development. This educational principle has been applied in combination with various research and development studies to improve the quality of health education materials (Baggaley, 1986:44; Jackson & Laking, 1986:101; Hugo, 1995:11).

- The modification of health messages and health learning materials, according to findings of formative assessment, to make it more suitable for a particular audience.

This particular guideline focuses on the final step in the design of appropriate messages, namely the modification of inappropriate messages or materials. Even in this regard there are numerous excellent examples to explain the essence of message modification. A pictogram used by the South African health authorities in AIDS prevention campaigns during the early nineties showed a silhouette image of a yellow hand as identification symbol of all local AIDS prevention programs and supplementary educational materials. Unfortunately, this pictogram communicated conflicting messages, since many African communities got the (incorrect) idea that only people with "a yellow skin" could get AIDS (Cape Metro, 13 Aug 1994). As the result of this misconception, the original pictogram was replaced with the international symbol for AIDS prevention, namely the depiction of a twisted red ribbon. Figure 3 illustrates another example of modifications made to an inappropriate visual for AIDS education - in this case from Egypt. It presents the message to illiterate that you must never re-use condoms. The "cross out" graphic symbol indicating "not allowed" or "don't do" are not familiar to Egyptians. Consequently, the original drawing (a) was modified (b) by replacing the inappropriate part with a graphic element similar to those used in "No parking" traffic signs. The modified version was more acceptable to the local communities (Goldsmith, 1984:360). This clearly illustrates the importance of adapting inappropriate visuals to make it more suitable for your audience. The same applies to written text in printed media such as posters, magazine articles and pamphlets. Chambers and Abrams (1986:94) offer a list of dental terms that are more suitable than academic jargon for educating children about oral health. For example, they recommend using "sleeping tooth medicine" instead of anaesthetic, and "tooth camera" rather

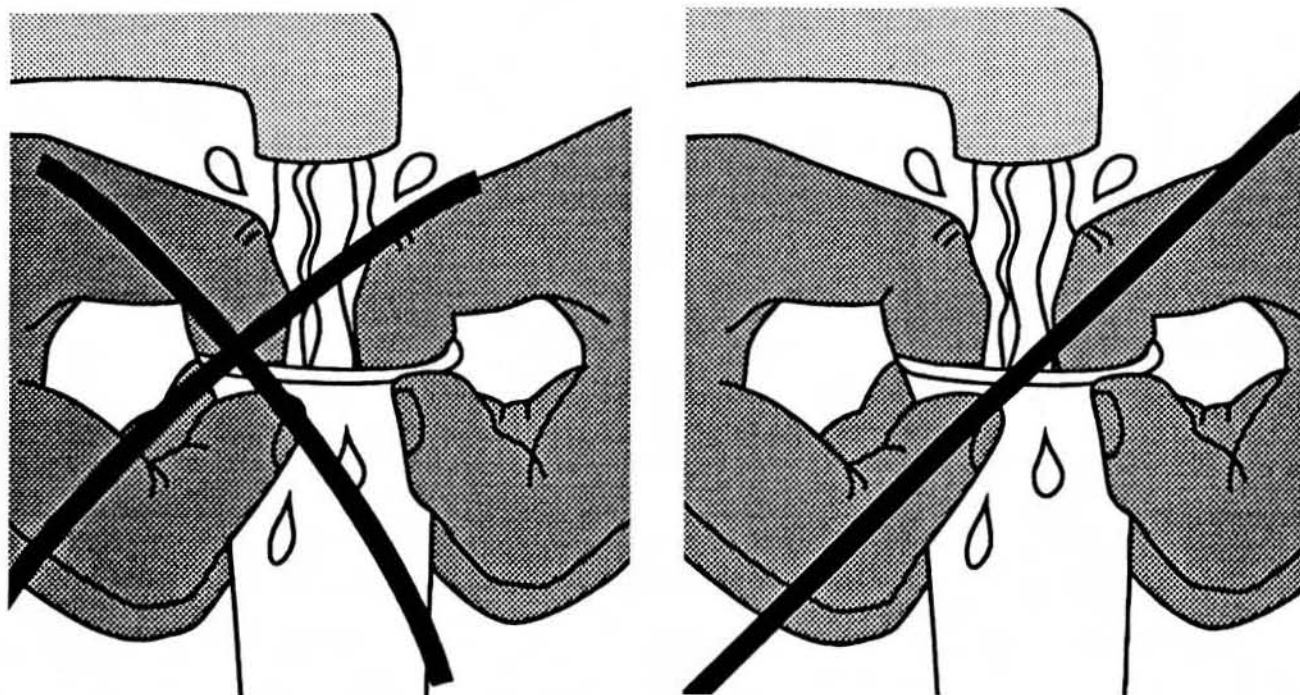
than X-ray equipment.

SUGGESTIONS FOR TESTING THE MODEL

The HAMSOC model would remain an academic exercise if it is not applied to improve the quality and suitability of health education messages for particular audiences. We therefore suggest that the model should be implemented and tested in health education and diseases prevention programs for selected target groups in South Africa, in order to assess its value. Such impact studies could focus on topics like HIV/AIDS or TB prevention, adolescent sexuality, and teenage substance abuse where effective and efficient education is highly needed. The first obvious program aspect where the model could probably make a valuable contribution is in the design of health learning materials (posters, pamphlets, etc.) for patient education at primary health care clinics. In this regard a critical important aspects is the extent of socio-cultural sensitivity in appropriate message design. It is advised that the indicated guidelines should be used as a starting point for drawing up a suitable checklist for socio-cultural sensitivity in health message and learning materials design. Such a checklist could include the following basic questions:

- Have you done a proper analysis of media effects and possible misunderstandings that could be caused by the socio-cultural profile of your audience?
- Does the design of your materials and messages reflect respect for the cultural, ethnic, sexual and/or religious diversity of society?
- Is there any gender, language, sexual, ethnic or religious bias present?
- Do you use more visuals to present your message to audi-

Figure 3: Modification of inappropriate graphic elements for AIDS education



ences with limited reading skills?

- Have you used the educational level and communication skills (including the level of visual literacy) of your audience as basis for the message design?
- Are you using the local language and subject terms the audience is familiar with?
- Are you avoiding academic jargon for lay people?
- Are certain ethnic groups presented by way of unrealistic or over-simplified stereotypes?
- Is any form of message modification (eg text, pictures, etc) necessary to make it more acceptable for the audience?
- Have you done the necessary modifications and have you done another field-test to assess its appropriateness?

One could draw up similar checklists with qualitative criteria to assess whether the programs meet the requirements of both health education as well as appropriate media and technology use respectively.

CONCLUSION

The design of appropriate media messages for health education is not an easy task. However, improvements can be made to current practices. The model presented here offers some clarification on the dynamics involved in the planning and design of appropriate messages for health education within a multi-cultural setting. In summary, an effective health education and communication strategy is characterised by clear objectives, a well-defined target audience, carefully chosen media formats and carefully designed messages to match the differentiated needs and profiles of our multi-cultural society. Hopefully the practical guidelines and examples will also contribute to health education messages of a higher quality. In short, media messages for health education in developing countries should be user-friendly, acceptable to the audience, culturally appropriate, non-patronising, easy to understand, visually attractive, and accurate.

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