Managing the AIDS Crisis in Africa: In Support of Pluralism

Malcolm MacLachlan
Psychology Department, University of Malawi, Malawi, and
Stuart C. Carr
Psychology Department, University of Newcastle, Australia

Introduction

In Sub-Saharan Africa today, there is mounting evidence that some African peoples have an ability to tolerate diverse belief systems concerning the cause, prevention, and treatment of physical and mental suffering[1]. Specifically, rather than supposing on the one hand a purely modern medical explanation, or on the other hand, a traditional explanation for their ailments, many people appear to be able to successfully integrate these apparently contrasting explanations of their suffering. The health problems so far found to be subject to this psychological phenomenon, which we have called “tropical tolerance”[1], include:

- malaria and schistosomiasis[2];
- epilepsy[3]; and
- psychiatric symptomatology[4].

In each case, a lack of correlation (correspondence) between modern medical and traditional health beliefs has been found. In other words, whether a person believed in a modern medical cause, prevention or treatment for their suffering bore no relation to whether they also entertained traditional beliefs about it.

One practical implication of this is that Malawian patients may be comfortable being attended to by doctors/nurses and/or traditional healers within the same illness context (a particular disease) or the same physical setting (a general hospital or health centre). In many African countries there exists a comprehensive network of traditional healers[5]. Given the acute shortage of medical personnel in the Malawian health service[6,7], the Ministry of Health in Malawi has recently been presented with an empirical case favouring the integration of traditional healers[8] into the contemporary health care system (see also[9]).

The authors wish to express their gratitude to Don Munro of the Psychology Department at Newcastle University, for his generous and expert statistical advice.

Journal of Management in Medicine, Vol. 8 No. 4, 1994, pp. 45-53 . © MCB University Press, 0268-9235

Our positive interpretation of tropical tolerance contrasts starkly with the more negative reactions of the past (see for example [10]). In Ghana, Jahoda[11] gave a rather equivocal interpretation of tolerance, seeing it as symptomatic of a culture in transition, and tacitly assuming that with development Western beliefs would prevail over traditional beliefs. In a similar manner Peltzer[12] has seen tolerance in Malawi as evidence of a society in transition. However, more recent observations of tolerance/pluralism in Kenya[13], Zimbabwe[14], and in Swaziland, South Africa, and east and west Africa generally[15] have looked on tolerance more positively. These latter accounts are compatible with our own interpretation of tolerance as a local resource for development, especially within the health sector[1].

One key area in which no search for tolerance has so far been made is AIDS, despite the prevalence and severity of the disease in many parts of Africa[16]. With more than 400 new cases of HIV infection being reported every day in Malawi[17], health service personnel are under increasingly unmanageable pressure. As the previous Minister of Health, Dr Ntaba, stated in an interview with the *Daily Times* newspaper (22 June 1993), "These statistics, frightening as they are, do not tell the full story of human emotional and physical suffering of individuals, families and communities or indeed of the economic and development strains placed upon the Malawi nation". As previous studies have highlighted possible roles for traditional healers in the prevention and treatment of a range of illnesses, we sought to explore whether tropical tolerance extends to the "modern" disease of AIDS. If so, then the integration of traditional healers into the modern health services' attempts to prevent and manage AIDS, could be of great value.

Having already surveyed Malawian undergraduates on the credibility of various sources of advice about AIDS, we thus decided to reanalyse our data, focusing on the relationship (if any) between the credibility ratings for modern health professionals (doctors and nurses) and for traditional healers, regarding the prevention and management of AIDS. We had already found that – on average – the modern health professionals were seen as highly credible while traditional healers were seen as less credible by university students[18]. This suggests that modern health personnel are seen as preferable in terms of their credibility. Our concern with investigating whether traditional healers could be an acceptable adjunct, is best answered by establishing whether a strong preference for modern medical personnel precludes the acceptance of traditional healers. If this is the case then a lack of tolerance would be reflected in a significant negative correlation between rating for the credibility of modern medical professionals and traditional healers.

We reasoned that in Malawi undergraduate students will have had more contact with Western influences and might therefore be more accepting of, or show a greater preference for, modern medical approaches to health problems in comparison to most of the rest of the population. The corollary of this is that those people with less exposure to Western influences (the majority in

Malawi[19]), would show more acceptance of traditional approaches to health problems. Consequently university students provide us with a relatively stringent test of the acceptability of AIDS prevention and care being provided by traditional healers and/or modern health professionals.

Method

Subjects

One-hundred-and-seventy-five male and female undergraduates at the University of Malawi took part in the study as part of their course work. All of them gave informed consent. They were enrolled in a number of different facultics and ranged in age from 17 to 23 years. Male students had a mean age of 21.24 years (SD = 1.52), while female students had a mean age of 19.95 years (SD = 1.79). There was no significant difference in the ages of male and female students. There were 130 males and 45 females. While this gender ratio is biased in favour of males, it is representative of the student population at the University of Malawi.

Materials and Procedure

Subjects were asked to use a four-point scale (ranging from “not at all credible” to “highly credible”) to rate the credibility of the following sources of information about AIDS:

- traditional healers;
- doctors;
- nurses,;
- psychologists;
- religious advisers,;
- friends;
- family;
- the radio;
- newspapers; and
- government posters.

Credibility was rated in relation to prevention of AIDS, and clinical management of AIDS.

Results

In this report we focus on ratings regarding traditional healers, doctors and nurses. Ratings for the other categories are the focus of another publication[18]. The (cor)relations between the variables of key interest are presented in Table I. It is clear that those who saw traditional healers as credible in a preventive role also rated them as credible in the clinical management of AIDS ($r = 0.37$, $p < 0.01$). A similarly significant relationship

is apparent in the ratings for doctors (r= 0.33, p < 0.01) and nurses (r= 0.57, p < 0.01). In addition to this there was complimentarity in the ratings of nurses and doctors, such that those who rated nurses as credible on either dimension (prevention or management) also rated doctors as credible on the other dimension. However, in contrast, there was no complimentarity in the ratings of traditional healers and doctors or nurses. There was neither a significant positive, *nor* a significant negative relationship in these ratings. This lack of correspondence is consistent with the notion of "tropical tolerance": whether a particular person saw a traditional healer as a credible source of prevention or management, bore no relation to whether they saw modern health professionals as credible sources, or not.

Psychometrically the possibility exists that the lack of any relationship between the credibility ratings for traditional healers and modern health personnel is due to "ceiling" or "floor" effects. However, inspection of the distribution of scores revealed that the full range of the scales was indeed used for traditional healers, doctors and nurses. The existence of this spread in ratings allows us to rule out the possibility of ceiling or floor effects distorting the data. Hence, the lack of correspondence between ratings for traditional healers and for doctors/nurses appears to be an authentic result.

As a number of strong correlations are present in the matrix shown in Table I it is likely that some underlying factors may account for these relationships (see[20]). To understand any such relationships it would be necessary to interpret them in the context of the other variables which were rated by subjects. The wider variables context into which these particular variables are best fitted is indicated in Table II (credibility ratings for AIDS prevention) and Table III (credibility ratings for AIDS management). These tables illustrate factor analytic solutions (using Kaiser's criterion and orthogonal rotation) which suggest that in each case three major underlying themes determined subject's ratings. Since factor loadings less than 300 are generally not deemed to be significant[20], for the sake of clarity, they are not presented in Tables II and III.

The resulting solutions are both clear and parsimonious. Sources of information for the prevention of AIDS, in terms of their credibility, were categorized in the students' minds in three ways: "government"; "traditional community" and "modern medical". It is apparent that the solutions to the

Table I. Intercorrelations between Credibility Ratings of Modern Medical and Traditional Healers

		Prevention		
		Doctor	Nurse	Traditional healer
Management	Doctor	33[a]	57[a]	08
	Nurse	80[a]	57[a]	14
	Traditional healer	12	05	37[a]

Note: [a]Significant at 0.01 level (two-tail probability)

Source	Factor 1 Government	Factor 2 Community	Factor 3 Medicine	Communality (h2)
Radio	865			80
Newspaper	843			74
Government poster	821			72
Friends		719		58
Religious adviser		718		55
Traditional healer		603		38
Family		575		44
Psychologist		417	365	34
Doctor			871	79
Nurse			809	68
Eigenvalues	3.29	1.49	1.25	Total
Percentage variance	33	16	12	61

Table II. Factor Solution on Credibility Ratings for AIDS Prevention

grouping of sources for the prevention of AIDS involves a link between the traditional healer and the community as distinct from the modern health professions. The very weak loading of the psychologist on the third factor which had strong loadings for the doctor and the nurse, suggests that "medicine" (doctors and nurses) is a better interpretation of the factor than say "modern health professional", which could be taken to include non-medical health professionals such as psychologists. Given that our subjects were themselves psychology students this is a noteworthy distinction.

Source	Factor 1 Government	Factor 2 Community	Factor 3 Medicine	Communality (h2)
Government poster	863			81
Newspaper	853			81
Radio	852			83
Traditional healer	486	–333	441	54
Nurse		854		79
Doctor		851		82
Psychologist		636	390	61
Friends			817	70
Family			765	68
Religious adviser			386	19
Eigenvalues	4.22	1.42	1.15	Total
Percentage variance	42	14	11	67

Table III. Factor Solution on Credibility Ratings for AIDS Management

Regarding the clinical management of AIDS, the negative loading for traditional healer credibility on the "medicine" factor in Table III, indicates that there is a degree of non-tolerance with regard to the management of AIDS. This negative loading remains when further statistical manipulation (a direct quartimin oblique rotation) is performed. Since Table I reveals no overall correlation between ratings of both types of source, we interpret this negative loading to mean that those at the extremes – i.e. who place a very high degree of trust either in modern health personnel or in traditional healers – do not trust the alternative type of source (indeed, when delta is increased from 0 to +0.6 (see[20]), ratings of the traditional healer no longer load significantly ($p > 0.05$) on the (modern) "medicine" factor). In Table III, the ratings of the traditional healer also load on the "government" factor. Overall with regard to management of AIDS, the traditional healer has a complex, subtle, and less clear profile than for the prevention of AIDS.

Discussion

We previously reported that university students see modern health professionals to be more credible than traditional healers in terms of the prevention and clinical management of AIDS. However, supporting the idea of "tropical tolerance", our present analysis clearly indicates that on average the preference for modern health professionals is not associated with a rejection of the credibility of traditional healers. The reality of how people view the comparative credibility of modern health professionals and traditional healers is much more complex, and possibly more encouraging, than a simple comparison of mean ratings can convey. Whether or not an individual rated modern health professionals as a credible source for the prevention or management of AIDS, was not related to how credible they judged traditional healers to be with regard to the same work.

When the credibility of various sources of information about the prevention of AIDS was considered, traditional healers were clearly distinguished from modern health professionals. Traditional healers were thought of as linked with a community orientation while the modern health professions of doctors and nurses ("medicine") formed a distinct group. We believe that this distinction is important for it also indicates that our students do not see doctors and nurses as having a community orientation. This is discouraging for health service managers who have sought to convey less of a high-tech image and more of a community service orientation for modern health services in Malawi[21].

The long established community orientation of traditional healers[5] fits well into the community model of health care. If these perceptions of the distinctive roles of modern health professionals and traditional healers are widely held, then the strengths inherent in these perceptions could give rise to a symbiotic collaboration between the two groups. If for the purposes of AIDS prevention modern health professionals and traditional healers could be seen as working together, then doctors and nurses could benefit by being associated with a greater community orientation, while traditional healers could benefit by being

associated with more highly credible sources of health prevention. This research and previous research has demonstrated that people in Malawi have the ability to tolerate (accept) simultaneous and different approaches to health problems[1-4].

It is interesting to note that a recent investigation into the way in which cultural traditions communicate sexual knowledge in Malawi has suggested that enhancing the importance of traditional values could help to prevent the spread of HIV/AIDS[22]. With the decline of some traditional values girls are now starting to have their first sexual intercourse before they have been initiated. Traditionally it is taboo for a girl to have sexual intercourse before being initiated. The researchers estimated that, for the majority of girls, the age of first sexual intercourse could be increased by approximately one year (from 13½ to 14½) if this tradition was encouraged. Of course the tradition of initiation need not be a static thing. It could be developed to include education on contracting HIV and on the development of AIDS. While traditional healers are generally not the ones who perform initiation ceremonies, this represents another pathway to empower traditional healers and incorporate traditional approaches in modern health prevention efforts.

Our results regarding the clinical management of AIDS are less clear cut than those for the prevention of AIDS. Here traditional healers do not fall into an exclusive or distinctive category. Instead they are seen as representing a combination of "government", "medicine" and "community" approaches to the management of AIDS. Furthermore, their negative loading (against) the "medicine" factor appeared to be accounted for by those with extreme ratings favouring doctors and nurses, also giving extreme ratings against traditional healers. While we know that this was true for only a small group (Table I shows that overall there was no significant relationship), it does nonetheless make the traditional healers' role in treatment somewhat problematic.

We would not wish, on the basis of this preliminary investigation, to rule out the role of traditional healers in the management of people with AIDS. We have noted elsewhere the possible palliative role that traditional medicine can perform[3]. Furthermore, Peltzer[12] has emphasized the efficacy of traditional healing in Malawi for a range of psychosocial disorders. Given the dramatic psychological and social ramifications of HIV infection and of the subsequent suffering with AIDS (see[23]), a role for traditional healers deserves closer scrutiny.

In some ways it is surprising that traditional and modern approaches to health care have not been more effectively integrated in developing countries. In Malawi Western models of health care have become increasingly dominant ever since colonial times, despite the fact that available resources mean that such systems can only serve a fraction of the population. Yet in some more developed countries, for example the USA, there is increasing evidence of integration. DeSantis and Halberstein[24] described the effects of immigration on the health-care system of south Florida, and noted that ethnic networks had been established including the use of traditional healers: "Virtually every type of traditional healer as well as

complete pharmacopoeias of the health cultures in their country of origin are available to south Florida immigrant groups"[24, p. 226].

The present study has highlighted the potential contributions of traditional healers in responding to Africa's AIDS crisis. Traditional healers would appear to have a useful contribution to make especially with regard to the prevention of HIV/AIDS. Collaboration between doctors, nurses and traditional healers could benefit the modern health professionals, not just by increasing the number of personnel working in the area of AIDS, but also by giving the modern health professional a stronger community-oriented image. While our investigation has focused on university students, who we argued offered a rather stringent test of traditional healers' credibility, it is now important to examine whether our findings generalize to other groups in Malawi.

References

1. MacLachlan, M. and Carr, S.C., "From Dissonance to Tolerance: Towards Managing Health in Tropical Cultures", *Psychology and Developing Societies*, Vol. 6 No. 2 (in press).
2. Ager, A., Carr, S.C., MacLachlan, M. and Kaneka-Chilongo, B., "Beliefs about Cause, Risk Reduction and Treatment for Schistosomiasis and Malaria in Rural Malawi", *Malawi Medical Journal*, Vol. 10 No. 2, (in press).
3. Shaha, B., MacLachlan, M., Carr, S.C. and Ager, A., "Palliative versus Curative Beliefs Regarding Tropical Epilepsy as a Function of Traditional and Medical Attributions", *Central African Journal of Medicine*, Vol. 39 No. 8, 1993, pp. 65-7.
4. Pengani, D., Carr, S.C., MacLachlan, M. and Ager, A., "Medical versus Traditional Attributions for Psychiatric Symptomatology in the Tropics: Which Reflects Greater Tolerance?", *Medical Science Research*, Vol. 21, 1993, p. 581.
5. MacLachlan, M., "Sustaining Health Service Developments in the 'Third World'", *Journal of the Royal Society of Health*, Vol. 111 No. 3, 1993, pp. 136-7.
6. House, W. and Zimalirana, G., "Rapid Population Growth and Its Consequences for Malawi", *Malawi Medical Journal*, Vol. 8 No. 2, 1992, pp. 46-54.
7. "Persuading the Doctors to Stay", *Southern African Economist,* Vol. 6 No. 1, 1993, p. 5.
8. MacLachlan, M. and Carr, S.C., *Tropical Tolerance in Malawi: A Report to the Ministry of Health*, Lilongwe, Malawi, 1993.
9. MacLachlan, M., "Mental Health in Malawi: Which Way Forward?", *Journal of Mental Health*, Vol. 2 No. 4, 1993, pp. 271-4.
10. Barbichon, G., "La Diffusion des Connaissances Scientifiques et Techniques dans les Public: Ses Conditions dans Les Pays en Voie de Developpement", *Journal of Social Issues*, Vol. XXIV No. 2, 1968, pp. 135-55.
11. Jahoda, G., "Supernatural Beliefs and Changing Cognitive Structures among Ghanaian University Students", *Journal of Cross-Cultural Psychology*, Vol. 2 No. 1, 1970, pp. 115-30.
12. Peltzer, K., *Some Contributions of Traditional Healing Practices towards Psychosocial Health Care in Malawi*, Asanger, Heidelburg, 1987.
13. Porter, D., Allen, B. and Thompson, G., *Development in Practice: Paved with Good Intentions*, Routledge, Guilford, 1991.
14. Elliot, E., Pitts, M. and McMaster, J., "Nurse's Views of Parasuicide in a Developing Country", *The International Journal of Social Psychiatry*, Vol. 38, 1992, pp. 273-9.
15. Wober, J.M., *Personal Communication*, 1993.
16. World Health Organization, "AIDS – Global Data", *Weekly Epidemiological Records,* Vol. 68, 1993, pp. 193-6.

17. Liomba, N.G., *AIDS News: A Newsletter for Health Workers* (Ministry of Health), Vol. 2 No. 1, 1993, p. 3.
18. Carr, S.C. and MacLachlan, M., "Family Health Care in Malawi: The Sustainable Community Alternative for AIDS Management", *ife Psychologia*, Vol. 2 No. 2, (in press).
19. Carr, S.C. and MacLachlan, M., "Asserting Psychology in Malawi", *The Psychologist*, Vol. 6 No. 9, 1993, pp. 413-9.
20. Tabachnick, B.G. and Fidell, L.S., *Using Multivariate Statistics*, 2nd ed., Harper, New York, NY, 1989, pp. 597-677.
21. Wilkinson, M., *A Mental Health Handbook for Malawi*, Assemblies of God Literature Centre Press, Limbe, Malawi, 1991.
22. Helitzer-Allen, D., Chilowa, W., Dallabetta, G., Flynn, C., Graham, N., Makhambera, M., Miotti, P. and Wangle, A.M., *An Investigation of Community-based Communication Networks of Adolescent Girls in Rural Malawi for HIV/STD/AIDS Prevention Messages*, John Hopkins University School of Hygiene and Public Health, Baltimore, MD, 1993.
23. Panos Institute, *AIDS and the Third World*, Panos Publications, London, 1988.
24. DeSantis, L. and Halberstein, R., "The Effects of Immigration on the Health Care System of South Florida", *Human Organization*, Vol. 51 No. 3, 1992, pp. 223-34.

(All enquiries relating to this article should be made to Dr M. MacLachlan, Psychology Department, University of Malawi, Box 280, Zomba, Malawi.)