16.1 The efficacy of traditional medicine (and biomedicine)

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1 Introduction

After a long period in which the work of 'traditional' medical practitioners was severely criticized by western (or western-trained) physicians and policy-makers, a change of climate seems to have taken place. WHO (1978) has brought out a number of reports which express positive appreciation of traditional medicine and recommend co-operation. Critics have asked on what argument WHO's policy is based. The only valid reason for recognizing and promoting a medical practice is its efficacy. What do we know about the efficacy of traditional medicine? In this chapter, I shall briefly survey this question and explore the prospects of traditional medicine in developing countries. I will also compare some aspects of traditional and bio-medicine and discuss which lessons can be drawn from that comparison. But first we must clarify the term 'traditional medicine'.

'Traditional medicin' is a misleading, embarrassing and naive term. It is misleading because it suggests that there is a more or less homogeneous body of medical thought and practice which can be put together under one name. Such a body does not exist, however. If one examines the type of medical practitioners which are designated by the term 'traditional', one will find an extreme diversity both in theories and practices. The only thing these practitioners have in common – also with 'alternative' practitioners – is that they are non-biomedical. That is why the term is embarrassing. Lumping together everything which is not 'ours' and treating it as if it were of one type is a classic example of ethnocentric ignorance. Finally, the term is naive because it suggests that 'our' medicine, the biomedical tradition, is not traditional. Viewing medical science as something outside the realm of culture, something which is simply true, is indeed a common practice. Or should I say: it used to be? A more cultural and nuanced view of biomedicine seems to be developing at the moment.

This is why I feel uneasy writing about 'traditional medicine' in such a general sense. Although I shall, from now on, use the term 'traditional' without inverted commas, I apologize in advance!

2 The efficacy of traditional medicine

Basically there are two wrong attitudes towards traditional medicine: romanticization and dogmatic opposition. The former implies gullibility, an *a priori* belief in its efficacy, the latter *a priori* rejection because its practice is not based on natural science premises. Both attitudes are premature and uncritical, and therefore unscientific. Nevertheless, the crucial question is: is traditional medicine effective? And, most ironically, the answer is: we do not know. The amazing thing about traditional medicine is that in the enormous amount of literature written on the subject one hardly finds an efficacy study which meets the strict requirements of scientific testing. 'Amazing' but also understandable. If measuring the ef-

fects of medical intervention is such a tricky, complex and expensive business, it is not surprising that testing efficacy in developing countries with limited facilities and financial means has hardly been carried out in a 'proper' way. Questions about medical effect are indeed more troublesome and ambiguous than writers of scientific reports suggest or want to admit. Final answers prove quite difficult.

An example close to home may clarify this. The numerous studies on the efficacy of homoeopathy have not been able to end the discussions on this topic. I have the impression that few people have changed their opinion about homoeopathy after reading the results of these studies. Opinions differ about what to do with factors such as 'spontaneous healing'. How should we treat the therapeutic effects of psychological, social and symbolic factors? Should the placebo effect be excluded from the trial? 'Scientific' rules require the exclusion. A double blind trial should teach us what a particular drug or treatment does in the body, independent of a person's psychology and his social and cultural situation. The problem, of course, is that such a body does not exist. Advocates of biomedicine may brush away that remark as irrelevant, whereas others may emphasize that such a clinical trial does not measure a thing, since a purely physical body does not exist in the real world. Accepting or not accepting the outcome of scientific tests of medical efficacy, therefore, depends very much on people's definitions of 'health' and 'medical effect'. And these are very much part and parcel of their daily philosophy and political views. For an unbeliever it is hard to accept the positive results of studies on homoeopathic efficacy, as Knipschild frankly admits in chapter 16.2 of this book.

Returning to traditional medicine in developing countries – I shall focus mainly on Africa – we can make two observations. In the first place, strict scientific testing, in vivo, through double blind procedures, has not been carried out in a way which would satisfy scientists, at least not as far as I know. Moreover, such testing seems unlikely to take place in the foreseeable future. The conditions hardly allow for strict control of experiments. The problems affecting the credibility of research into homoeopathic efficacy occur much more strongly in situations in the South. Pluralistic health-seeking behaviour makes it extremely difficult to attribute a particular effect unambiguously to a particular intervention (if that were possible at all). Separating bodily symptoms from social, cultural and symbolic effects is particularly problematic in cultures where the concepts of health and illness are more broadly defined and intertwined with social and cultural conditions.

Napralert is a database in Chicago for research about the use and efficacy of herbal medicines. I estimate that 99% of its entries do not meet scientific requirements. But *if* we had a reasonably good insight into the biological efficacy of some herbs or other medicines used by traditional healers, what judgement could we then make about their medical practice in more general terms? What can we say about the quality of the practice of a biomedical physician, when we know that five of his medicines are effective in a biological sense? We may safely conclude that, in a scientific sense, the efficacy of traditional medical practices is almost fully unknown.

My second remark is that when the efficacy of a medicine is known, many objections can be raised against the validity of that knowledge. Laboratory tests have shown that certain herbs in Ayurvedic medicine in Sri Lanka contain powerful therapeutic constituents. *Coleus forskolii,* for example, does indeed affect the activity of the heart and *Momordica garantia* is indeed effective against diabetes. Conversely, other Ayurvedic herbs have been proven to contain substances with no or only very slight therapeutic activity. What, however, is the use of such a natural science test of a practice based on a combination of physical, social and religious premises? If the theoretical principles of the researcher differ from those of the medical practice which is being tested, there is ample room for misunderstand-

ing. The researcher may be measuring something the healer never intended to bring about. The healer and the researcher may be talking about different things when they discuss health or medical effect. There is ample reason to question the sense of a scientific test of non-western medical practices.

The research which *has* been carried out with regard to traditional medicine is more impressionistic: following or interviewing patients after treatment by a healer. It is not surprising that this method has led to very diverse and ambivalent reactions. Observers seem to be rather impressed by the therapeutic results of bonesetters and healers dealing with psychological problems. It is well known that traditional healers in many parts of the world are able to cure simple fractures more quickly than biomedical practitioners, but this has never been proven with hard figures from a controlled clinical trial. The cure of psychological problems is even less documented.

There are, on the other hand, also reports of dangerous and harmful practices by traditional healers, for example applying enemas to children with serious diarrhoea, letting women bleed after delivery to get rid of 'dirty blood', using cow urine during convulsions.

The unspecific and impressionistic character of these observations does not force anyone to draw a conclusion with regard to traditional medicine. Those who despise traditional medicine have room to maintain that attitude. Harmful practices confirm that they are right and positive observations are attributed to bias and other research defects or are explained away as placebo effect. Conversely, advocates of traditional medicine have no reason to change their position either. Patent malpractices are seen as excesses committed by quacks or as regrettable mistakes which occur everywhere, even in biomedical institutions. The favourable observations confirm *their* positive appreciation. In summary, it is highly unlikely that there will be a clearer and more uniform opinion on the efficacy of traditional medicine in the foreseeable future.

3 Prospects for traditional medicine

There is a famous statement by the medical and development anthropologist George Foster that traditional medicine everywhere in the world will disappear within twenty years after good quality biomedicine has become available to everybody (Foster and Anderson, 1978). That statement seems a bit bold, but is difficult to refute, for where in the South can good quality biomedicine be obtained by everyone?

Most prognoses for traditional medicine concern its position in conjunction with biomedicine: is there a future for co-operation between traditional medicine and biomedicine? WHO's recommendation for co-operation (WHO, 1978) was enthusiastically received by some policy-makers and members of the medical profession. Most of them, however, considered the report as a beautiful gesture which showed respect for other cultures and their medical traditions. Their main reaction to the report was an equally 'beautiful gesture': polite lip service. Only few people openly resisted WHO's invitation. One of them was Velimirovic (1984), who wrote that African cultures have indeed produced beautiful things, such as carving, music and dancing, but that their medical traditions are not worth keeping. But let us concentrate on those who are sympathetic to traditional medicine and promote co-operation. How do they view the future of traditional medicine?

A famous case in point is the 'primary health training for indigenous healers' programme in Techiman, Ghana, which has been described in various publications (e.g. Warren et al., 1982) and which is also the subject of the film 'Bono medicines'. The training programme consisted of fourteen sessions in which healers were taught various sub-

jects, including hygienic preparation and storage of herbs, oral rehydration therapy, nutrition, prevention, the treatment of measles, convulsions and jaundice, basic first aid and family planning. The film shows that the traditional healers who participated in the programme were keenly interested in co-operation. Inadvertently, however, the film also shows that true co-operation – on an equal basis – is out of the question. The main purpose of the training programme is to incorporate traditional healers into the existing biomedical system. They are to diminish the pressure on the local hospital by becoming community health workers who take care of people with simple complaints. Their chief task will be to improve the functioning of the hospital. They are believed to be particularly fit for that job as they are respected members of the community. They enjoy the confidence of other members of their village and there is little danger that they will abandon their task and leave the village, since they are economically and socially rooted in the community.

Ironically, the healers are not so much appreciated because of their own medical expertise but rather because of their suitability to play a role in the biomedical system. That suitability shows itself in their openness to learn new medical techniques and in the absence of practices which appear harmful in our eyes. 'Co-operation' is thus sought with traditional healers who are willing to adapt to biomedical conditions and do not cause 'problems'. Their own knowledge and capacity is not touched upon. Their role in the project is mainly being pupils, not teachers. There is no moment in the film where a traditional healer instructs a doctor or a nurse. 'Co-operation' proves a euphemism for re-training and finding employment in the biomedical service.

Those who are most sympathetic to traditional medicine and most interested in co-operation thus contribute unintentionally to its disappearance. Their embrace could turn into a 'kiss of death' if traditional healers indeed surrendered to their biomedical colleagues.

There are several reasons to believe that this is not going to happen. In the first place, projects like the one just described are relatively scarce in Africa and Latin America. (The situation in China, India and a few other Asian countries is different.) Secondly, the more competent, and certainly the more 'traditional' healers are, they will be less likely to join such a project for co-operation, as they have little to gain from it (Landy, 1974). And finally, there are indications that the healers who did join that training programme in Ghana, never became the type of community health workers which had been envisaged. Recent follow-up research, ten years after the project had ended, suggests that the healers who took part did not really change their medical practices, even though they still remembered what they had been taught (Ventevogel, 1992). Contrary to the impression they gave in the film, they proved quite 'stubborn' in sticking to their own methods which they considered more adequate for most of the cases they had to treat. For them, the most important aspect of the training course was that they felt they were taken seriously and respected by the biomedical establishment and the government. They remembered the sessions as occasions where they could manifest themselves as a professional group of medical experts. Looking back we realize that they were not being used by the biomedical people to serve their purpose. They rather used the training for their own ends.

Pritech, an American organization involved in the study and promotion of primary health care, has carried out research into the possibility of co-operation between biomedical and traditional practitioners in Africa. One of the questions they asked traditional healers was how they viewed possible co-operation. They replied that they welcomed co-operation provided they were approached and treated respectfully. They did *not* want to become lowly (or un-)paid village health workers or first-aid assistants, dependent on and responsible to a Ministry of Health. They refused to be swallowed by the biomedical system (Pritech, 1991). What the traditional healers hope to achieve by co-operation is recognition

of their medical practice by the representatives of biomedicine. Unfortunately for them, health planners often have quite different objectives.

If the history of the Ghana project heralds future developments in Africa, we can expect that African traditional medicine will have a long life, alongside the biomedical institutions. Developments we are witnessing in our own society confirm that expectation. Alternative medicine survives and even seems to grow in the Netherlands, in spite of the fact that we have one of the best health care systems in the world. Moreover, alternative medicine is being discriminated against in the insurance system, and scientific tests 'prove' time and time again that its efficacy is dubious or nonexistent. Apparently, the scientists who carry out the tests perceive another reality than the patients who claim that alternative healers relieve them of their complaints. 'Efficacy' proves an inefficient concept for an interdisciplinary, intercultural and layman-professional discussion.

4 Lessons?

One lesson may be retained from this failure to learn more about the efficacy of traditional medicine. One of the reasons we are unable to measure therapeutic efficacy neatly is that medical effects are surrounded by a cloud of symbols, beliefs, social expectations, experiences and emotions. The lesson is that we should not consider that 'cloud' as a disturbing and confounding factor which obscures our view of 'real' efficacy, but to accept the cloud as an inherent part of the efficacy we are trying to delineate. Identifying the placebo effect as 'fake' is losing sight of an inalienable dimension of the human condition. Testing the effects of a medical intervention on a body after its context has been eliminated, is a methodological construct which may make sense from a particular science perspective, but can never provide the final word on efficacy. If the results of such a test *are* presented as the final word and the only valid conclusion with regard to 'efficacy', a scientific statement turns into a scientistic one.

The confrontation with the cloud around traditional medicine should lead us back to the cloud covering biomedical practice. That cloud is an inherent part of the medical tradition in our society. Biomedicine is carried out in a rich social and cultural context. Beliefs and expectations, desires and fears, work and leisure, relatives and friends, symbols and commodities contribute to experiences of well-being and illness. It is in that context that medicine produces its effects. No effect can be achieved outside a context, because no one is ever outside a context. If the effects of biomedicine are spectacular – and most will agree they are – these successes are co-produced by that context. Culture is indeed one great placebo. That placebo is not our enemy but our ally in the maintenance and restoration of human health.

This conclusion does not pretend to preclude or criticize basic scientific research in laboratories and controlled clinical settings, but adds something to it, increasing its value. In the final analysis everything enters the world of meaning where it will be transformed and magnified in the process of cultural appropriation. Accepting the cultural 'clouds' we will be able to take a more relativist view of our own medical tradition and to be more open to the – unmeasurable – efficacy of traditional medicine.

The most important lesson to be learnt from 'traditional medicine' is not that it is more effective than some sceptics assume. That may be the case, but systematic and solid research into its efficacy has hardly been carried out. Studying traditional medicine rather teaches us to take a more relativist view of our own medical tradition and our concept of therapeu-

tic efficacy. The main lesson is that therapeutic success is part of a wider process involving social, cultural and psychological factors. That is true for traditional medicine *and* biomedicine. Traditional medicine, therefore, helps us to reassess the merits and limitation of our own medical tradition. A salutary side-effect of this reassessment will be more respect and openness towards the achievements of other medical traditions.

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