

# Traditional livestock healers

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## Summary

Traditional 'animal doctors' are a substantial component of livestock healthcare systems in developing countries. However, in contrast to their counterparts in human ethnomedicine, such healers and their roles have been largely ignored by the modern veterinary community. While sometimes used as informants for community-based animal healthcare projects, traditional healers are rarely integrated into project training and delivery systems, and in many countries, they work in legal limbo. This paper overviews the little that is known about traditional livestock healers and their practices and argues that they represent a valuable, but as yet untapped, resource for extending many aspects of basic animal healthcare, especially to poor and smallholder producers in remote or difficult environments. Finally, the authors suggest broad steps for integrating these healers into conventional systems.

## Keywords

Community-based or integrated animal healthcare service – Ethnomedicine – Ethnoveterinary medicine – International animal agriculture – Intersectoral healthcare delivery – Livestock healer – Traditional animal healthcare provider – Traditional veterinary medicine.

## Introduction

Since ancient times, traditional 'animal doctors' have provided ethnoveterinary services to stockraising communities. Until only a few decades ago, veterinary colleges and public Veterinary Services paid little or no attention to these local-level experts – hereafter referred to as 'healers' – except perhaps to label them as quacks or witchdoctors, whose practice should even be criminalised. However, this view has begun to change. In the developed world, people have become more interested in alternative medicine for their animals (25), and in the developing world – the focus of this paper – both government and private Veterinary Services now acknowledge that they still fail to meet the needs of many stockraisers (7).

Thus began the search for new and more responsive paradigms of animal healthcare delivery. One solution was to train selected stockraisers themselves as community-based animal healthcare workers (CBAHWs). These CBAHWs operate as part-time, private practitioners in remote, nomadic, or war-torn areas – much as traditional healers have long done – where conventional services are economically unviable or cannot effectively reach. Recent research demonstrates that 'user-pays' CBAHW systems in fact do reach poor stockraisers in remote areas, improve rural livelihoods, and are sustainable (9).

This shift to such localised veterinary paraprofessionals was both preceded and accompanied by a growing recognition of the value of local/indigenous agricultural knowledge. This gave rise to a field of study known as ethnoveterinary medicine (EVM), which focuses on local-level animal healthcare (13). Ethnoveterinary techniques are the stock-in-trade of traditional healers; they are also the origin of much of modern veterinary medicine and animal science.

To date, studies of how CBAHW and related livestock development initiatives interact with or impact traditional practitioners and their work are scant. In contrast, there is a relatively rich literature on the integrated delivery of human healthcare, which combines traditional and modern practitioners and treatments. A common example is training traditional birth attendants in additional, modern techniques of perinatal care, and then linking these midwives into formal healthcare systems (6). Increasingly, in both the developed and developing world, alternative or traditional healers of humans are also forming associations and federations. Amongst other things, these organisations collaborate with medical colleges and government agencies and lobby for legal recognition (18).

Even descriptive information on who, exactly, livestock healers are, and how they go about their business is at best fragmentary.

This is rather ironic, given the wealth of published and unpublished information now available about EVM – much of which was collected from livestock healers in the first place. However, past research concentrated on the practices rather than the practitioners.

## Approach

Given that no body of literature exists on animal healers *per se*, this paper draws on information scattered in publications on related topics. Principal sources include a review of more than 1,200 documents on EVM (20) and nearly 500 project-based reports and supporting documents covering approximately 140 CBAHW initiatives world-wide (15), as well as field research and publications by the authors on EVM and livestock development since 1978 (21, 22, 14, 16).

Additional sources include personal communications from livestock development experts world-wide and as-yet unpublished conference presentations. Precise references to the examples and data cited throughout this paper can be found in the above-mentioned reviews (20, 15), unless otherwise indicated.

## Healers and their work

### Becoming a healer

Traditional healers are ‘people whose profession is treating others and animals for the purpose of restoring health’ (29). They are commonly ‘recognised by the community [or region] in which they live as competent to practise [ethno]medicine’ (12). Livestock healers are usually stockraisers themselves.

Typically, healers learn their craft from a parent or other relative. The relevant information and skills are mostly transferred by word-of-mouth and hands-on experience. Other learning opportunities include apprenticeships, deliberate experimentation, trial-and-error, personal observation (e.g. as of animal self-medication) and travel, which often leads to borrowing medicines and techniques from other cultures. For some societies and practitioner types, dreams, visions, and religious studies are also important.

### Types of healers

In view of the documentation of the numerous and vital roles of women in animal care world-wide and their specialised knowledge of certain livestock species and diseases (particularly as related to dairying and food preparation), surprisingly, the literature views healers as mostly male. Some exceptions are reported, namely medicine-women among both North and Latin American Indians. However, female healers in India report that they learned their craft from their fathers only because they had no brothers.

Some healers may be generalists in that they address most ailments of most animal species in some way, but many are specialised. The latter may offer only certain types of treatment, such as herbal medicines, firing (i.e. cauterisation), massage, castration, or particular spiritual/religious interventions. However, empirical interventions are often accompanied by rituals; and ritual treatments frequently include manipulative or herbal components.

McCorkle *et al.* (19) compiled a list of 105 types of healers who attend livestock in thirty-three countries and seventeen societies in Africa, the Americas, Asia, Europe, and the Near East. A rough categorisation indicates that only about 21% of these types focus on spiritual practices, whereas nearly 70% offer mainly empirical services, many of which are largely comparable to those provided by modern veterinarians. Examples of such services include bone-setting, surgery, vaccination, firing, castration, obstetrics, breeding assistance, nutritional advice and medicinal treatments.

Unlike the modern dichotomy between veterinarians and physicians, traditional healers often serve animals and humans alike. For example, the majority of fourteen healer types identified in Nepal treat both groups. Of the 105 healer types referenced by McCorkle *et al.* (19), only 17% are clearly reported as treating solely livestock. They tend to specialise in a certain species (such as the ‘cow doctors’ of Burkina Faso) or in techniques used only on animals (such as firing, castration, de-horning, foot-trimming and breeding).

### Healer skills and treatments

As noted earlier, livestock healers’ practices have been mostly described and studied in terms of EVM. This covers everything traditionally known and done to keep animals healthy and productive or ‘happy’, as healer-shepherdesses of the Tzotzil Maya of Mexico say. However, nowadays EVM also includes many techniques adopted from modern veterinary medicine because healers and their clientele are constantly exposed, and eager to adapt, to new challenges and situations.

Like any medical approach, EVM has both strengths and weaknesses. Some traditional practices have been outdated by changing disease threats and environments while others have been marginalised by more convenient modern drugs when the latter are accessible and affordable. Stockraisers are always alert to such advantages because traditional medicines and the materials for making them can be cumbersome to prepare, available only seasonally, effective only in large doses and difficult to standardise. Finally, some EVM practices can be harmful – such as withholding drinking water from animals with diarrhoea, applying overly toxic materials to combat ectoparasites, or scarifying stock with anthrax.

However, many EVM practices do work and make sound veterinary sense (24). Indeed, many modern drugs are derived

from or modelled after chemical substances of natural origin, first discovered and used by traditional healers and stockraisers.

A number of ethnoveterinary pharmaceuticals have undergone clinical tests and trials. Some of these compounds proved positive for the ailments in question, while others tested as medically indifferent or negative (23). Although such trials are valuable for commercial drug development, they rarely take into account the long-term or overall physiological effects of traditional medicines, synergisms among ingredients in local polyprescriptions, or the fact that ethnopharmaceuticals typically form just one part of an integrated disease management approach, and so may be effective only in combination with other practices.

In this last regard, EVM encompasses a vast corpus of knowledge and experience about animal husbandry in relation to health. The benefits of many traditional feeding, herding and other management practices for preventing or minimising the spread of certain diseases are well documented (24). By comparison, very little is known about the benefits of spiritually motivated practices in EVM, yet at least some of these have positive, empirical effects on livestock health and productivity and help avoid diseases – as when stockraisers take steps to protect their animals from ‘evil’ (cold, dusty or disease-bearing) winds or from ‘haunted’ (infected or contaminated) areas.

Data on the economics of proven EVM medicines versus commercial drugs are also limited. However, those available indicate that the former can provide a cheap and effective alternative to the latter. For example, controlled on-farm experiments in the Andes of Peru demonstrated that a homemade tobacco-based dip reduced mite infestation in sheep by a rate comparable to the best commercial dip on the local market. Moreover, gathering the plants and preparing the homemade treatment for the average-sized family flock required only four hours of labour. In contrast, the commercial product would have cost a family about US\$ 9 in an area where daily wages were well under US\$ 1 (17).

Other practical, economic and socio-economic factors can favour the use of healers and validated EVM, particularly in remote or difficult areas. Some of the advantages of using traditional healers are that in emergencies, healers and their treatments are often more easily available, transport expenses and opportunity costs can be avoided because stockraisers do not have to travel to places that may or may not sell the commercial products needed, and there is less chance that expired or adulterated drugs will be sold to stigmatised or uneducated groups. However, comprehensive socio-economic studies considering such factors are lacking.

### **Healer availability, clientele, caseloads and earnings**

Healer services vary greatly, both across and within geographic and culture areas. A few areas reportedly have no livestock

healers at all (i.e. North Kivu in Zaire), while in others, producers manage almost all their animal healthcare needs themselves (i.e. Quechua Indians in the Andes).

In contrast, Maasai throughout East Africa enjoy the services of one *laibon* for forty to fifty-six people. *Curanderos* in Venezuela and Raika healers in India are found in nearly all communities of their respective cultures – although Raika specialists in camel medicine are fast disappearing (I. Köhler-Rollefson, personal communication, 2003). Meanwhile, nearly every village in Nepal has two or three healers, typically with different specialisations.

Healers may help only family, friends, co-villagers, or co-ethnic groups, but they often also serve neighbouring villages and other, wider groups who prize their services. Moreover, sometimes a particular livestock healer may be so famed for his skills that he serves an entire region of a country and may occasionally be requested to treat human patients in area hospitals.

Depending on the health problem, a healer may travel to visit patients, especially non-ambulatory ones; patients may be brought to the healer; or, based on the description from the client of clinical signs, the healer provides the necessary advice, instructions and medications for clients to administer themselves.

Caseloads also vary greatly. Among Beni Amer Arabs, *seb-lalamro* healers handle about three clients per day, but the significance of this in patient load is unclear. Most healers in Kerala, India see between five and ten cases per day, but a few have up to fifty, which they say is sufficient to earn a fulltime living. Perhaps significantly, the latter usually live in villages 10 km to 15 km away from the nearest veterinary post.

With regard to earnings, in some areas healers receive hardly any payment at all. For example, in India, Nepal and Sri Lanka, healers reportedly earn only respect and social capital, such that they will be helped by their communities in times of need.

More commonly however, healers may be paid in cash, kind or labour, depending on cultural norms and practitioner compassion, especially with regard to extremely poor clients. In eastern Zaire, healers may receive a chicken or other animal for their services. In Rwanda, they are usually paid in cash, but at varying rates according to per-client patient numbers, the severity of the ailment and treatment type. Elsewhere in Africa healers are paid only if treatment is successful (28).

Still other factors may influence payment. For instance, Tibetan *sngag* spiritualists and Quechua *paqu* diviners are far more expensive than their empirical colleagues. These healers are therefore consulted only as a last resort or only for especially valuable animals. Among the Akamba people of Kenya, livestock healers differ in that younger healers focus on their

earning potential, but older healers are more concerned about the quality of the services they offer. Furthermore, rural Akamba healers earn less than their urban counterparts.

## Healers and livestock development

### Healers as community-based animal healthcare workers

Many project assessments recommend recruiting and training healers as CBAHWs. In parallel, many field studies testify to the eagerness of livestock healers for new knowledge, techniques, drugs and equipment. World-wide, livestock healers have independently integrated modern practices into their clinical work (albeit often imperfectly); requested information and formal training; and occasionally, organised themselves to win government recognition or greater collaboration with conventional veterinary personnel.

Ironically, however, the criteria of CBAHW projects for selecting trainees may discriminate against healers (15). Furthermore, few projects have consciously involved healers as community workers – with varying degrees of success.

Overall, discussions about the much-needed privatisation of veterinary services invariably centre on government and private veterinarians, animal health assistants, CBAHWs and stockraiser associations, i.e. everybody but healers (27), despite the age-old professional role that they have played, and continue to play, in day-to-day animal healthcare.

The literature offers few clues about why livestock development initiatives do not target healers as CBAHW trainees, or seek other forms of collaboration. Possible explanations include ignorance of the existence of healers, scepticism about their work, and fear of competition for technical, social, or economic status. For their part, healers might be equally concerned about such status issues. Also, as self-employed professionals, they may be wary of subjecting themselves to any imposed system, particularly one that is prejudiced against them.

### The impact on healers of community-based animal healthcare worker projects

Findings on this subject are few and mixed. Several studies indicate that healer numbers are declining, which is perhaps what has led some authors to predict the demise of healers unless they are thoroughly integrated into CBAHW projects from the beginning (3). In one study in Kenya, healers themselves suggested factors contributing to their shrinking practices. These included the certification that accompanies modern veterinary training, the greater convenience of commercial drugs, free medicines distributed by government

Veterinary Services, shrinking herd numbers and other socio-economic or cultural considerations (11).

However, *atet* healers among the Dinka people in southern Sudan expressed different views (*atet* are the most skilled and empirical of four types of Dinka healers that attend both humans and animals). They reported that CBAHWs cut into their livestock business only slightly, and not at all in remote areas or surgical cases. At the same time, however, *atet* said that certain major diseases are better controlled by modern medicines and veterinary services than by the means they have at hand (Vétérinaires sans Frontières, Switzerland, unpublished data).

Mixed findings also emerged from a comparative impact assessment of established CBAHW projects in Kenya, the Philippines, and Tanzania, as follows (10):

- In Kenya, the use of healers reportedly doubled in areas with CBAHWs. This assessment is credible in light of decades-long efforts by the Intermediate Technology Development Group (ITDG) to promote both EVM and its practitioners in Kenya

- In Tanzania, the demand for healers declined for all services in which CBAHWs were trained and equipped (notably, backpack spraying for ectoparasites, castrating with burdizzos, prescribing and selling commercial drugs and semi-legally giving injections). However, focus groups of stockraisers served by these CBAHWs rejected the idea of calling upon community-based workers for obstetric procedures or bone-setting because their traditional healers in these specialities were reportedly far more adept (C.M. McCorkle, personal observation, 2003)

- Finally, in the Philippines, where most of the healers interviewed were herbalists, CBAHWs had a negative impact on the business of healers (10). However, this might well have been because Heifer Project International (HPI) was working locally to incorporate the treatments used by healers into the toolkits of CBAHWs.

### Other roles for healers

Irrespective of the reasons, as noted earlier, healers have so far figured in livestock development mainly as key informants. Examples include Operation Lifeline Sudan of the United Nations Children's Fund and the participatory community-based vaccination and animal health project of the Pan-African Rinderpest Campaign in Ethiopia, Kenya, and Sudan. These programmes consulted healers about EVM and then used their input to dialogue better with communities and CBAHW trainees (3).

There is widespread agreement that learning about EVM and the ways in which communities have traditionally accessed ethno- or conventional veterinary services is critical to the sound design and successful implementation of CBAHW



projects. In particular, clarification of local disease terminologies and intelligence has proved vital both for CBAHW training and for credible epidemiological surveys. Recognition of the importance of such information has given rise to a new approach referred to as 'participatory epidemiology', which promises to improve epidemiological surveillance in remote areas while simultaneously encouraging community participation in disease control (4).

Several livestock development projects have gone a step further and added proven or widely acclaimed EVM options to the treatment choices presented to clients (especially smallholders and the poor). Such bottom-up approaches commonly require considerable time and patience. This may be why they have been implemented mainly by private voluntary groups. Notable pioneers in this regard have been the HPI of the United States and the ITDG of the United Kingdom. Recently, these and other organisations have also mounted efforts to validate EVM treatments – either in consultation with recognised healer-experts or in collaborative arrangements with national and international research centres and institutions.

Furthermore, several such groups working in Africa, India, and South-East Asia have tackled legislative and other measures to strengthen the age-old status of healers as private practitioners (1, 5, 11). Activities have included the following:

- linking healers with colleagues in their own and other regions to exchange professional information and also document their composite knowledge and experience
- helping healers improve upon their EVM, with modest inputs of modern veterinary-medical knowledge or techniques
- training healers in other modern methods of animal healthcare
- assisting healers to register and form associations that can represent their interests.

## Integrating livestock healers into conventional systems

In 1978, the Alma Ata Declaration of the World Health Organization recommended the full utilisation of all resources to attain basic healthcare for people world-wide – including all relevant traditional practitioners (6). Along the same lines, animal healthcare should also make full use of both livestock healers and EVM for the following reasons:

a) Livestock healers are established traditional practitioners who have empirical skills and significant clientele. Stockraisers consult such healers up to 25% of the time when they require professional advice, even when conventional veterinary services are available (10).

b) The fact that many healers treat both animal and human patients (often using the same medicines and techniques for the same or similar conditions) offers opportunities for expanded joint, and thus more efficient, delivery of animal/human and traditional/modern healthcare, especially in remote or difficult areas (18). Research shows that where such joint services are offered (as in immunisation campaigns), remote or nomadic people are more likely to take advantage of them for humans (especially for children) as well as livestock (26).

c) The integration of proven (and environmentally sustainable) EVM treatments into CBAHW enhances the choices available to both service providers and their clients.

In summary, integrating healers into conventional healthcare systems would mean that animal (or human) healthcare could be expanded to groups who are under-served by existing conventional systems or who do not have access to healthcare at all. Much, however, remains to be done if this possibility is to become reality:

a) The modern sector must learn more about the roles and importance of healers. In-depth studies are required to understand:

– the extent of the current practice of healers (female as well as male) in terms of all the variables outlined earlier in this paper, i.e. specialisations and human/animal patients, clientele, caseloads, earnings, etc.

– how healers and their clients may see these patterns as having changed or as beginning to change, e.g. the growing importance of women as healers in light of continuing male out-migration, warfare, and human immunodeficiency virus/acquired immune deficiency syndrome.

b) Studies should investigate with healers, clients and other stakeholders how the practice of healers could be improved, strengthened and linked economically as well as functionally with conventional systems. The extensive literature on such links in the human healthcare sector should be very helpful when planning a similar process of integration for traditional livestock healers.

c) More laboratory, and especially, on-farm research is required on the efficacy of traditional medicines and approaches using methods that take into account the holistic nature of EVM.

d) Model projects should be developed to document systematically how traditional and conventional healthcare knowledge, medicines, techniques and services can be integrated.

e) Impact studies and cost-benefit analyses are needed to determine the cost-effectiveness and socio-economic impacts of traditional, conventional and combined strategies of basic healthcare delivery at the household, community, and national level.

f) Also needed are studies of national and international policies and the vested interests of different regulatory, supervisory, and

medical-professional bodies. These can provide useful information for reforms for wide-scale, legal implementation of the most promising approaches to extending basic healthcare (2).

For example, a precondition for the incorporation of healers into conventional systems is a conducive legal framework. However, in many countries, veterinary/medical legislation restricts the dispensing of certain drugs to registered professionals (8). This means that healers and CBAHWs may be operating outside the law if they integrate modern medicine into their practice. Recognising this, proponents of CBAHWs are lobbying for corrective legislation, but such legislation should also accommodate healers.

g) Finally, policies and legislation also need to address the protection and sustainability of the local flora, fauna, or other relevant natural resources in order to prevent their

overexploitation when promoting the use of proven traditional medicines. In parallel, national policies about intellectual property rights should ensure that the originators of the knowledge benefit from the wider adaptation and use thereof.

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## Les guérisseurs traditionnels du bétail

E. Mathias & C.M. McCorkle

### Résumé

Dans les pays en développement, les « docteurs des animaux » traditionnels prennent une part importante dans les soins aux animaux d'élevage. Pourtant, contrairement à ce qui s'est passé en ethnomédecine humaine, la communauté contemporaine de vétérinaires a largement ignoré ces praticiens autochtones, ainsi que leur contribution. Même si les guérisseurs sont parfois consultés sur des projets communautaires de santé animale, ils sont rarement impliqués dans les formations et la prestation des soins assurées dans le cadre de ces projets. En outre, dans de nombreux pays, ils travaillent dans un vide juridique. Les auteurs passent en revue nos connaissances limitées sur les guérisseurs traditionnels du bétail et leurs pratiques. Ils estiment que ces derniers apportent une contribution précieuse et encore inexploitée, dans la mesure où ils offrent de nombreux services de santé, notamment aux animaux des petits exploitants à revenus modestes vivant dans les zones éloignées et inhospitalières. Enfin, les auteurs font des propositions d'ordre général pour intégrer ces guérisseurs dans les systèmes de santé conventionnels.

### Mots-clés

Guérisseur du bétail – Agriculture animale internationale – Médecine ethnovétérinaire – Médecine vétérinaire traditionnelle – Prestataire traditionnel de services de santé aux animaux – Service communautaire ou intégré de santé animale.

## Curanderos tradicionales del ganado

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### Resumen

En los países en desarrollo, el 'doctor de los animales' tradicional es una pieza importante de los sistemas de atención sanitaria del ganado. Pese a ello, y a diferencia de lo que ocurre con sus homólogos de la etnomedicina humana, esos curanderos y sus funciones han merecido escasa atención por parte de los círculos veterinarios modernos. Aunque a veces ejercen de informadores para proyectos de sanidad animal de dimensión comunitaria, los curanderos tradicionales se incorporan rara vez a los dispositivos de formación y aplicación que acompañan a esos proyectos, y en numerosos países siguen trabajando en una especie de limbo jurídico. Tras pasar revista a lo poco que se sabe sobre los curanderos tradicionales del ganado y sus prácticas, los autores postulan que ese colectivo constituye un recurso valioso, aunque por ahora inédito, para desarrollar muchos aspectos de la atención zoonosológica, sobre todo en beneficio de los minifundistas pobres que trabajan en zonas aisladas o contextos difíciles. Por último proponen, a grandes líneas, los pasos que deben seguirse para integrar a esos curanderos en los sistemas convencionales.

### Palabras clave

Agricultura animal internacional – Curanderos del ganado – Dispensadores tradicionales de atención zoonosológica – Etnoveterinaria – Medicina veterinaria tradicional – Prestación de atención sanitaria intersectorial – Servicio zoonosológico integrado o de ámbito comunitario.



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