

Community-based animal healthcare, participation, and policy: where are we now?

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Introduction

Although community-based animal health workers (CAHWs) have been around for many years, few countries support CAHW systems with appropriate policies and legislation. However, compelling economic and institutional forces have now placed CAHWs on the desks of national policy makers and the veterinary profession, and real energy is being directed at policy reform to support CAHWs. Reasons for increased attention to CAHWs include structural reform and privatisation of veterinary services.

This paper discusses some experiences and common arguments when engaging central policy makers and veterinary professional bodies in order to develop pro-CAHW policy.

A changing landscape of veterinary services

In the early days of CAHWs, it was the norm in most developing countries for all veterinary services to be delivered by the state. Emulating patterns established by colonial administrations, many post-independence governments continued to provide free or subsidised vaccinations, other basic prophylaxes such as parasite control, and even some therapeutic care. However, governments failed to appreciate the full costs of universal delivery of veterinary services. Under colonial rule, services were aimed mainly at benefiting only a small minor-

ity of wealthier producers and limited segments of the livestock sector: colonial settlers and elite or export markets.

Government agencies suffered from a host of additional problems. An obvious one was the lack (or the post-colonial deterioration) of basic infrastructure like roads and refrigeration facilities for vaccines ('cold chains'). Other problems spanned corruption, financial crisis, constant shortages of critical inputs (e.g. drugs and vaccines), and political authorities who were insecure, indecisive, arbitrary, and interventionist. Indeed, it was not uncommon for up to 90% of veterinary-agency funds to go on salaries alone, as governments tried to staff up to provide universal coverage singlehandedly. Obviously, this left virtually nothing for operating expenses. But even when full operating expenses were available, government veterinary staff were (and in many countries, still are), too few and too poorly distributed and resourced to meet even the most fundamental animal healthcare needs of their nations' rural citizenry.

Veterinary privatisation has been widely promoted as a solution to state inefficiencies in service provision. However, efforts have focused in more intensive and commercial livestock rearing areas using models of private veterinary practice similar to those existing in the North. Here, we have a veterinarian providing a mobile service to farmers and deriving income from clinical services, sale of drugs and contracts from

government. More remote rural areas of the South have usually been viewed as non-viable for private veterinary practice and indeed, economic factors such as huge transaction costs suggest that alternative approaches to privatisation are needed. The relatively low cost and local acceptability of CAHWs seems to offer a way forward, particularly if CAHWs can be linked to, and supervised by animal health assistants or veterinarians running veterinary pharmacies.

Five arguments in the debate about pro-CAHW policy

Early on in the debate, opposition to CAHWs among veterinary policy makers, professional bodies and academics was often intense and vocal. Some commonly expressed views and were as follows:

1. We've already been doing this CAHW thing for decades. It doesn't work and there is nothing new you can tell us about it

This view relates to old, colonial-style veterinary services in more remote areas. In these areas, a government District Veterinary Officer would sometimes train local livestock keepers as 'Vetscouts' or vaccinators. The approach recognised the value of local animal health knowledge and skills, but differed from later, well-designed CAHW projects based on joint analysis of problems and solutions, community selection of CAHW trainees and attention to local concerns rather than government priorities to control epizootic diseases, often in 'high potential' areas.

In other countries, mass animal health training programmes in the post-colonial period were often targeted at school leavers and again, focused on priorities as perceived by government and trained workers who were not necessarily liked by livestock keepers. In both the vetscout and mass training programmes, workers received incentives from government that ultimately were not sustained. In contrast, CAHWs seem to work best when supported by the private sector.

2. These CAHWs are illiterate and backward. There is no way they can diagnose and treat diseases

Vets receive a five or six year university education, often based on curricula borrowed from Northern universities. The notion that a short, say two-week, training course is sufficient to enable CAHWs to recognise and treat a few diseases is difficult to accept, particularly by veterinary schools and professional associations. There are many issues here:

• Urban bias – vet schools tend to produce graduates who traditionally have expected desk-bound employment with government or who prefer to work in or near major urban

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centres. Others move into research careers, but most research is conducted in accessible areas rather than the distant communities where CAHWs are found. Institutional knowledge of participatory training techniques for illiterate trainees and the real, practical problems of delivering services in remote areas is often limited.

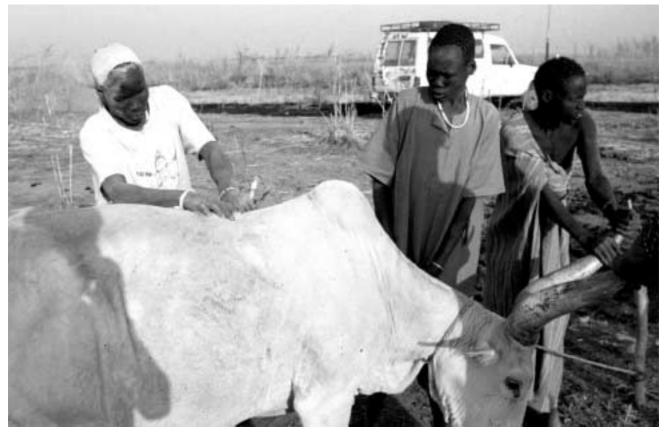
- Professional bias not least that professional diagnostic skills are automatically superior to indigenous knowledge, and that educated people must know more than illiterate people. This argument often overlooks the fact that professional skill depends on practical, hands-on experience rather than education alone. Yet government veterinary services have been severely under-resourced and overly bureaucratic. Are vets practitioners or administrators?
- Where there is no vet in the absence of access to professional veterinary workers, livestock keepers try to make the best of what is available. This often means using poorquality drugs from the black market, or unlicensed and unregulated shops. Sometimes human drugs are used to treat animals. Little advice on the correct use of drugs is available from these outlets.

Much of the debate about drug usage by CAHWs centres on drug resistance. The argument goes that misuse of drugs such as antibiotics encourages drug resistance. When resistance spreads to humans, the health of people is put at risk. Similarly, drug residues in foods are generally considered to be harmful to people.

Established strategies to minimise the risk of resistance are now well understood. They involve:

- Prophylaxis to prevent disease in the first place, meaning direct measures such as vaccination, or indirect measures to keep the animal's overall immunity up.
- Good treatment based on:
 - 1. Right diagnosis
 - 2. Right choice of medicine
 - 3. Right dose rate
 - 4. Right period of treatment

When there is no alternative, people use whatever is around. CAHWs are probably the only way to improve quality of service in these situations.



Unfortunately, this is not easy to guarantee in the conditions under which many poor livestock keepers operate. However, recent evidence suggests that CAHWs actually improve use of veterinary drugs. For example, studies in Mozambique and Ghana (Oakley et al., 2002) reveal that farmers use antimicrobials routinely but with no knowledge of which to use, at what dose rate or for how long. Not uncommonly they are also using black-market medicines of dubious quality. In the absence of a CAHW, most farmers would cite the local drug seller, as being their main source of advice but in most cases that advice would be wrong. When there is a CAHW, over 70% of livestock keepers would rank them as their preferred source of animal health advice. And in the vast majority of cases, their advice would be correct.

Interestingly, despite their greater knowledge, veterinarians did not rank highly as sources of advice, as again, they were simply too far away. It is therefore hard to see what contribution veterinarians could make to patterns of medicines usage.

The evidence is, however, that CAHWs do reduce the

hazards of drug administration, by:

- directly improving standards of administration;
- increasing prophylactic use/improving overall herd health, and therefore indirectly reducing the number of animals needing antimicrobial therapy.

This is not to say that incorrect drug administration does not occur when CAHWs are around. Both drug administration by CAHWs and veterinarians were found to be lacking, as both were hamstrung by farmer reluctance to pay for full-dose therapy. But from a policy angle it does suggest that contrary to the original assumption, CAHWs can be a large part of the solution rather than being a large part of the problem.

When there is no alternative, people use whatever is around. The herder seen in the photo above is trying to treat a cow with pneumonia and his diagnosis is correct. However, he is untrained and has prepared a solution from oxytetracycline capsules designed for oral administration to humans. He has wasted his money as the treatment is unlikely to work. CAHWs are probably the only way to improve quality of servces in these situations.

Well-regarded veterinary journals now publish 'scientific' papers describing local disease descriptions and epidemiology, as captured by participatory inquiry



3. The international community will say we have a secondrate veterinary service if we legalise these CAHWs

In an era of globalisation, developing countries are thinking more about export of animals and animal products within the framework of the World Trade Organization (WTO). In the animal health world, the Office Internationale des Epizooties (OIE) in Paris develops guidelines to ensure that traded livestock commodities are disease-free. The guidelines are largely based on the capacity of national veterinary services and systems of livestock production in the North. They require countries to demonstrate understanding of the disease situation throughout their territory and provide verifiable evidence of disease status. Opponents of CAHWs claim that such understanding can only arise from professional assessment at all levels, but overlook the funding and logistical practicalities of placing sufficient numbers of vets in the field to collect disease information.

A more pragmatic approach links CAHWs with national animal health surveillance systems and combines CAHW-derived information with some professional supervision and verification. At present, the OIE has no concerns with CAHWs

provided they are well-trained, supervised and are integrated into national veterinary services. This is a logical way to strengthen capacity of national disease information systems.

4. We already have thousands of retrenched but well-trained government animal health professionals and technicians. Why can't these people provide the service?

In some countries, structural adjustment resulted in dramatic downsizing of veterinary staff employed by government. The argument goes that CAHWs should not be promoted because there are large numbers of trained but unemployed, former government veterinary workers such as Animal Health Assistants (AHAs) and Animal Health Technicians (AHTs) who can provide services. This argument breaks down for at least three reasons.

- CAHWs are usually part-time workers who also make a living from rearing livestock. Their expectations with regards to financial incentives are usually low compared with AHAs or AHTs, particularly in a private sector market.
- CAHWs live within their communities. In pastoral areas, they move when herds move and therefore, can provide an immediate service. This differs from a sedentary, urbanbased AHA or AHT who, in the case of disease problems, has to be located and then transported to the community.
- Perhaps for the above reasons, when given a chance to select someone for training communities rarely select (or even mention) unemployed AHAs or AHTs.

5. This is just another donor-driven approach like structural adjustment. We're fed up with donors telling us what to do. All these people conducting studies on CAHWs have been bought off by donors

Vets who are influential in national policy making arenas sometimes resort to this argument when all else fails. The argument usually includes strong criticism of donor-enforced structural adjustment programmes that apparently, led to the decline of state veterinary services and loss of jobs. Occasionally the argument extends to colleagues and peers who have been persuaded by donors to support CAHWs. Implicit is the notion that at some time in the past, there was a golden age of public sector, universal veterinary service provision that reached all corners, communities and sick livestock. The outstanding feature of debate on these points is the absence of alternatives to CAHWs, given the profound resource and logistical constraints. Evidence of the positive impact of CAHWs, arising from different sources and methodologies is rejected out of hand, because researchers were 'in the pocket' of donors. This evidence includes:

Aggregating review findings from CAHW programmes in

Tanzania, the Philippines, and Kenya, we found that families without access to community animal health (CAH) lost between 15-25% of their herd each year. The presence of a CAHW more or less halved these losses.

- Data from elsewhere has found that patient recovery rates were 70% in communities with CAHWs, but only 10% in those without community-based paraprofessionals.
- We also know that CAHWs are a low cost option. Estimates for training and establishing programmes vary between \$200 and \$500 per CAHW, with benefits over a 10-year period being estimated at between 40 and 200 times the initial investment.

But clinical services are only part of the picture. By also considering the government (rather than the smallholder) to be the client, CAHWs have demonstrated their ability to deliver government programmes on a contract basis. Vaccination, for instance, can be delivered more effectively than government structures were ever capable of doing.

Conclusions

We now see that over a period of some 30 years, the desire of communities to have access to basic, affordable animal health care has remained undiminished, as have the economic and institutional forces that have led to the demand being met through CAHWs.

What has changed is the forum for the debate, as the topical issues have moved from technical and institutional issues at the community level, through (often) confrontation with the veterinary establishment and government, to a

When there are no roads to reach communities in remote areas, it makes sense to use CAHWs as sources of information on livestock disease. National animal health information systems can be strengthened



growing recognition both nationally and internationally of its potential in delivering on parallel policy objectives. It is issues of regulation, defining the relationship between CAHW systems and the larger animal health network that will most likely determine the pace of change for the foreseeable future.

CAHWs are now legal in several countries. In others, perversely, their illegal status undermines the ability of governments to regulate CAHWs or make full use of their services, while denying stockholder and CAHWs alike the protection of the law.

We are now in a dynamic but uncertain situation where institutions and policy lag behind the technical and economic reality of CAHW systems. Institutional and policy reform takes a good deal of effort. For many countries, the next step is therefore to decide whether or not they really want it.

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NOTE

Constance McCorkle holds an MA and a PhD in anthropology plus an MA in linguistics, all from Stanford University. She has lived, studied, lectured or conducted research in 45 nations of Africa, Asia, Europe, and Latin America. Since 1980, she has researched and published widely on livestock, community animal health and ethnoveterinary medicine.

The IDL group, chiefly through their subsidiary Livestock in Development, works with governments and development organisations in Asia, Africa, the Middle East and Latin America on the economic analysis, reform and strengthening of veterinary services.

REFERENCE AND FURTHER READING

This paper is drawn from the forthcoming book *Community-based Animal Health Workers: Threat or Opportunity?* by the IDL Group and due for publication in late 2002. The reference cited by Peter Oakley and colleagues comprises a chapter in the book.