

# Traditional methods in management of diarrhoeal diseases in Uganda\*

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*A total of 292 traditional healers were interviewed in five districts of Uganda to discover how diarrhoeal diseases were treated by them. At least two healers were present in every village visited, and over 42% of their case-load was concerned with diarrhoeal treatment.*

*The investigation showed that a great variety of herbs/plants are used by traditional healers in the treatment of diarrhoeal diseases. All those interviewed used water as the main vehicle for their herbal preparations, the amount prescribed daily ranging from 20 ml to over 100 ml for children (in the case of 54.5% of healers) and 100 ml to over 500 ml for adults (56.6%); 26.4% of healers considered fluid supplements as mandatory and 70.5% advised patients to take as much fluid as possible. Only 3.1% of healers either limited or did not advise fluid intake.*

*These findings indicate that traditional healers could play an important role in interventions to control diarrhoeal diseases using modern oral rehydration therapy if they are assisted to improve their techniques.*

The present investigation covered representative areas of the country, taking into account the social background, customs, and cultural attitudes. The country was divided into four regions and five districts were selected: Tororo in the east, Apac in the north, Kampala and Mukono in the centre, and Mbarara in the west.

## Methods

The field research methods included oral interviews with each healer to establish their personal profiles and work routines, as well as standard questionnaires concerning their practice, educational background, possible causes of diarrhoea, etc. The following were documented:

- their views on the causes of diarrhoea;
- methods in managing diarrhoea cases;
- plants/herbs used;
- methods of preparation and administration of herbal extracts;
- success rate of treatment;
- items proscribed during treatment;
- type of fluids prescribed for diarrhoeal patients;
- interactions with other healers.

Various chiefs and village elders helped to mobilize healers for the interviews. Random sampling

was used in the selection of healers who participated in the study.

## Results

### *Profile of the healers*

A total of 292 healers from five districts were interviewed; 42% were women and 12% were below 30 years of age. Educational status: no education, 40.1%; only primary, 46.6%; secondary and higher, 13.3%. While only 0.7% had practised traditional medicine for less than one year, 64.4% had been in practice for over ten years.

Fourteen distinct categories of healers, based on professional specialties in traditional medicine excluding traditional birth attendants, were identified. Nearly all used herbs/plants as an essential ingredient in treatment; 0.3% (diviners) and 1.1% (magicians) denied the use of plant materials in effecting cures, while 43% (herbalists) used herbs exclusively. Spiritualists (41%), besides using herbs, claimed that their ability to effect cures resided in spirits which acted through them. Other groups included fortune tellers, bone setters, and those who practised combinations of the above specialties (16%). Cases of diarrhoeal diseases were usually handled by herbalists and spiritualists.

### *Methods used by the healers*

Diarrhoeal diseases were treated by traditional healers using only oral administrations of herbal extracts. In all cases, fresh plant materials were collected, washed and treated, using one of the following methods: (1) extraction in cold water

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(19.9%); (2) extraction in boiling water (64.4%); (3) drying and pounding into powders, which are then extracted with either cold or hot water (11.6%); (4) miscellaneous methods of preparation (4.1%) which include mixing the extracts with raw eggs; licking the powdered plant materials; mixing the powdered material with clay (for oral use); making salt solutions with the extracts; mixing powdered materials with milk; mixing the extracts with porridge; chewing the washed, fresh plant materials; tapping the milky fluids from tree trunks and drinking the same, either with honey, milk or porridge; and making the powdered plant materials into pastes for eating.

The majority of healers (64.4%) boiled their materials during heat extraction, which may indicate an attempt at purifying their preparations before use. Water was generally the vehicle for antidiarrhoeal herbal materials; the amounts employed per day are shown in Table 1.

Table 1: Percentage of healers and the amount of water prescribed as the vehicle for herbal materials

Amount of water/day	% of healers prescribing:	
	For children	For adults
20 ml	29.8	—
20–50 ml	30.5	24.3
50–100 ml	8.9	15.8
100–500 ml	12.0	43.5
500–1000 ml	3.1	11.0
1000–1500 ml	—	2.1

Most healers also recommend other fluids such as water, milk, fruit juices, porridge, tea, sugar and salt solutions, 11.6% advising a total of over 500 ml/day. However, in isolated cases, milk and orange juice are forbidden. There is generally no restriction on food intake, although certain foods are prohibited by some healers. The fluids or fluid supplements and foods recommended are summarized in Tables 2 and 3.

While 68.1% of healers claim that the maximum period for treatment of diarrhoea should not exceed three days, 28.4% admitted that it could take longer than that, adding that the diarrhoea should stop within a week of treatment. In unsuccessful cases, patients are generally advised to seek orthodox medical treatment.

### Herbs/plants

Over 250 herbs/plants were claimed to be of therapeutic benefit, either alone or in combination. A few herbs are widely used in several districts, some plants being very popular in certain areas. The most

Table 2: Foods and rest prescribed for diarrhoea

	% of healers prescribing
<b>Foods:</b>	
Soft foods	13.0
Miscellaneous foods	1.3
Starchy foods (e.g., cassava)	2.1
Not prescribed	10.0
No restrictions	73.6
<b>Bed rest:</b>	
Essential	19.5
Optional	80.5

Table 3: Type of fluids prescribed for diarrhoea

	% of healers prescribing
Advising fluid intake	26.4
Leaving it to patients to take as much as possible	70.5
Not advising fluid intake	1.7
Limiting the fluid intake	1.4
<b>Types of fluids:</b>	
Plain water	52.0
Sugar and salt solutions	17.2
Milk	8.9
<b>Fruit juice:</b>	
Orange	3.8
Tomato	2.1
Passion fruit	5.8
Banana	0.3
Sugar cane juice	0.3
Black tea	7.9
Honey	0.3
Meat soups	1.4
<b>Porridges:</b>	
Maizemeal	12.7
Millet	2.7
Rice	1.7
Cassava flour	0.3

frequently used herbs are shown in Table 4.

The part of the plant used includes the leaf, root and bark, and rarely the fruit or flowers. The majority of healers use leaves and roots. These are washed and either pounded wet and extracted in cold or hot water, or dried and made into powders. After extraction, the herbs are generally filtered using a sieve or cloth. Over half (51%) use only a single herb to treat the various forms of diarrhoea, while others mix two or more plants.

The majority of healers (79.8%) denied any side-effects or adverse reactions due to their treatment. To deal with side-effects such as gastrointestinal hypermotility and vomiting which were sometimes reported and recognized as counterproductive, additional

Table 4: Plants most frequently used in the treatment of diarrhoeal diseases

Name of plant	Family
1. <i>Bridelia micrantha</i> (Hochst) Bail	Euphorbiaceae
2. <i>Bridelia scleroneuroides</i> Pax	Euphorbiaceae
3. <i>Combretum binderanum</i> Kotschy	Combretaceae
4. <i>Fagara angolensis</i> Engl	Rutaceae
5. <i>Ficus anaphalocarpa</i> (Miq) A. Rich	Moraceae
6. <i>Haemanthus multiflorus</i> Martyn	Amariyllidaceae
7. <i>Hydnora johannis</i>	Hydnoraceae
8. <i>Ipomoea obscura</i>	Convolvulaceae
9. <i>Kigelia africana</i> Descne	Bignoniaceae
10. <i>Kosteletzkya grantii</i>	Mliavaceae
11. <i>Mitragyna rubrostipulacea</i> (K. Schum) Haru	Rubiaceae
12. <i>Mitragyna stipulosa</i>	Rubiaceae
13. <i>Momordica foetida</i> Schum	Cucurbitaceae
14. <i>Piliostigma thonningii</i> (Schumach)	Caesalpiniciaceae
15. <i>Priva cordifolia</i> (L.F.) Druce	Verbenaceae
16. <i>Protea madiensis</i> Oliv	Proteaceae
17. <i>Rhynchosia resinosa</i> (A. Rich) Bak	Papilionoideae
18. <i>Sopubia ramosa</i> Hochst	Serophulariciceae
19. <i>Ziziphus mauritiana</i> ( <i>abyscinia</i> A. Rich)	Rhamnaceae

herbs were prescribed in conjunction with the anti-diarrhoeal extracts.

#### Concurrent use of other drugs

The healers were asked their views on the use of allopathic drugs together with their herbal preparations: 77.4% disapproved, the main reason being the need to assess the effectiveness of their own drugs (21.6% of them disapproved for fear of possible drug interactions); 3.8% did not mind whether their patients used other forms of treatment or not; and 18.8% gave a straight "yes" to concurrent use of other drugs.

#### Views on causes of diarrhoeal diseases

Healers were questioned about the causes of the diarrhoeal diseases they treated. Their responses included worms (26.0%), poor sanitation (30.2%), unclean water (39.7%), and "false teeth" and "ancestral wrath" (2.0%). Most of them (50.7%) thought that diarrhoea was mainly due to eating contaminated foods; 17.8% failed to mention any cause of diarrhoea (Table 5).

Treatment for diarrhoea accounted for 43% of the case-load of traditional healers; those interviewed claimed to handle a total of 5176 diarrhoeal and 6900 non-diarrhoeal cases per month. However, these figures are approximate and may be an underestimate since some of the healers were unable to provide precise numbers of the patients they saw. Apart from diarrhoeal cases, traditional healers also handle patients suffering from a variety of diseases.

Table 5: Possible causes of diarrhoeal diseases

	% of healers
Did not know the cause	17.8
Believed the cause to be: <sup>a</sup>	
Intestinal worm infestation	26.0
Unclean or improper foods	50.7
Complication of other diseases	7.5
Unclean water	39.7
Poor sanitation	30.2
Poor breast hygiene	1.0
Poisoning	4.5
Complication of measles	5.8
Food allergy	1.0
Local Beliefs (false teeth, ancestral wrath, evil spirits, and bewitching)	13.3

<sup>a</sup> Causes very often overlap.

#### Status of traditional medicine

About 48% of the healers interviewed took up traditional medicine as a cultural heritage since Ugandan society continues to support traditional practices for corporeal, psychological, and cultural well-being and satisfaction.

Spirit inspiration appears to occupy an important place in the thinking of both the healers and the patients. Most traditional healers, particularly the spiritualists, appear to see a patient not only as a material being but also as a being with a supernatural element embedded in the material self. According to the spiritualists, treatment of a patient does not end with the administration of herbal extracts; one needs to appease the spirits (of ancestors, relatives, etc.) to achieve a complete and everlasting cure. For them, spirits play an important role in the causation of disease, particularly when these are "annoyed". It is through their occult activities that spiritualists appear to have managed to command their high degree of confidence and respect from their patients.

Virtually all healers use herbs and other natural products as essential and important ingredients in their medications. Some of these plants possess pharmacological properties and therefore possible therapeutic effects (2-4, 6, 8, 11). Cures are sometimes dramatic and this helps to strengthen the position of healers in society. Thus, as long as modern or orthodox medical facilities remain remote from the majority of the population, traditional medicine (1, 5, 9) will continue to command the respect of the people.

Most healers recognize their limitations. The majority treat diarrhoea for 1-3 days, and if it does not subside, they advise their patients to seek alternative treatment, generally at hospitals. In this way, traditional healers seem to be giving a useful service to their patients—as therapists and at the same time

as advisers when their own treatment appears to be failing. This seems not to be true with respect to their treatment of other diseases. There is a feeling that traditional healers realize failures too late, often keeping patients under their care without any improvement and releasing them to seek alternative treatment when the condition may be irreversible. This is a frequent source of complaint from orthodox medical practitioners against traditional healers.

This study revealed that there were at least two traditional healers in every village, serving the local people as well as patients from distant places, depending on the popularity of the healers.

## Discussion

In Uganda the practice of traditional medicine is still widespread as a cultural heritage and as a source of income for practitioners. This is likely to continue. The majority of healers interviewed were mature people, who had been practising for years.

Treatment of diarrhoeal disease is by the use of herbal remedies and other natural products, supplemented by various fluids which patients are advised to take. Traditional healers appear to recognize the importance of fluid supplements in diarrhoea, although the amounts are generally far below the recommended quantity for effective oral rehydration therapy (ORT); proper training of healers could correct this deficiency. It is worth noting that 17.2% use some kind of sugar and salt solutions as fluid supplements and that most use water in volumes greater than 20 ml (54.5%) for children and above 100 ml (56.6%) for adults as the vehicle for their herbal preparations.

Nearly all the healers use herbal preparations to treat all varieties of diseases they handle (7, 12–14). Even when supernatural powers are said to be the key to cure, herbs are still used; and even when a patient is possessed by evil spirits, the use of herbs appears to be mandatory.

Healers feared the potential adverse effects arising from drug interaction; 77.4% were therefore not prepared to allow their diarrhoeal patients to use other remedies when under treatment. This fear may not extend to the administration of oral rehydration salt solutions in view of their use of various fluids to supplement their treatment for diarrhoea. More information is needed on this issue.

A large variety of plants are used in the treatment of diarrhoea; over a hundred types were collected which were claimed to have some anti-diarrhoeal properties, but it is very unlikely that all of them have a true anti-diarrhoeal effect.

Although a number of healers appeared to treat

only signs and symptoms rather than the actual disease, some had exact knowledge of the diseases they were treating. When diarrhoea is suspected to be due to contaminated foods, unclean water, poor breast hygiene, etc., different herbs are given in each case. This differentiation of diarrhoea according to suspected causes appears to contribute to the multiplicity of herbs employed by traditional healers; dehydration is recognized by most healers as part of the diarrhoeal picture. They use traditional ways of determining various causes of diseases, e.g., the use of special shells, beads, etc., which are tossed around and the manner these fall is claimed to have specific meaning, whose interpretation requires training and experience.

Almost all healers interviewed claimed success, the diarrhoea usually subsiding within two to three days of treatment in both adults and children. Some give their herbal extracts only once; they claim this to be sufficient to stop diarrhoea. This form of treatment is generally associated with constipation when an excess is taken. In the few cited cases of unsuccessful treatment, the patients were referred to a modern medical centre.

On the basis of our findings we should like to suggest that selected traditional healers be assisted to improve their diarrhoea management techniques, e.g., concerning the proper and routine use of oral rehydration salts (ORS). Thus, the services of these healers could be improved and then utilized in primary health care programmes. Traditional healers live with the people and share their customs and traditions; many people, particularly in the rural areas, still rely on their services. With proper organization these healers could provide effective and beneficial service in primary health care delivery.

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## Résumé

### Méthodes traditionnelles de prise en charge des maladies diarrhéiques en Ouganda

On a interrogé 292 guérisseurs traditionnels exerçant dans cinq districts d'Ouganda, afin de savoir comment ils traitaient les maladies diarrhéiques. Il y en avait au moins deux par village visité et plus de 42% des malades qu'ils voyaient étaient atteints de diarrhée.

L'étude a montré que les guérisseurs utilisent toutes sortes de plantes pour traiter cette affection. Tous les guérisseurs interrogés prenaient de l'eau comme principal véhicule pour leurs préparations médicinales; la quantité prescrite quotidiennement allait de 20 ml à plus de 100 ml pour les enfants (54,5% des guérisseurs) et de 100 ml à plus de 500 ml pour les adultes (56,6%); 26,4% des guérisseurs estimaient que ce complément liquidien était obligatoire et 70,5% d'entre eux conseillaient à leurs malades de boire le plus possible. Seuls, 3,1% des guérisseurs limitaient l'apport liquidien ou ne le conseillaient pas.

Ces résultats indiquent que, pour peu qu'on les aide à améliorer leurs techniques, les guérisseurs traditionnels pourraient jouer un rôle important dans les interventions visant à lutter contre les maladies diarrhéiques au moyen de la réhydratation par voie orale.

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