Awareness Claims Versus Actual Knowledge of Oral Rehydration Therapy and the Salt Sugar Solution in Northeastern Nigeria

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Summary
Focus group discussions involving rural and urban residents drawn from Kanuri and Bura settlements, were conducted as part of an on-going survey of the perception and treatment of diarrhoea among major ethnic groups in northeastern Nigeria. Awareness of oral rehydration therapy (ORT) was universal among participants, but knowledge of its function and the preparation of the sugar salt solution (SSS) was markedly deficient among the Kanuris, especially in rural areas. Reported SSS use parallel the knowledge of ORT function/SSS preparation and seemed heightened by church-fellowship activities among the rural Buras. Surprisingly, tasting was apparently not realised by participants to be an important step in SSS preparation. These preliminary results suggest that knowledge of ORT function and SSS preparation need further emphasis in ORT awareness campaigns, and that religion-based activities could be a potent and actualizable method of ORT promotion.

Introduction
A key target objective of the WHO/CDD programme for the reduction of diarrhoea-related morbidity and mortality is the effective home management of diarrhoea based on the prevention of dehydration through the use of oral rehydration therapy (ORT) as the first appropriate response to diarrhoea. Unfortunately, the beneficial use of ORT is only infrequently practiced in many homes. This makes the determination of impediments to ORT use in the home an important field of study.

Although several factors affect ORT use, and no unique set of factors is universally applicable, it is worthwhile to evaluate responses in each area as they might contribute to an understanding of both the local and global situation. During an on-going study of the perception and treatment of diarrhoeal diseases among two major ethnic groups in northeastern Nigeria, we encountered sharp contrasts and variations between awareness claims, and actual knowledge and reported use of ORT/SSS (sugar salt solution), which partly explains the problems with ORT use in the home in Nigeria. This forms the basis for this report.

Methodology
The study was conducted among the Kanuris and Buras, the two major ethnic groups in Borno State, northeastern Nigeria, in their urban and rural settlements. The Kanuris are predominantly Moslems and have a low literacy level (western-style education), while the Buras are mostly Christians and have a relatively high literacy level. Eight focus group discussions (FGDs) (four each among the Kanuris and Buras) were held in Maiduguri, the state capital, and eight in the rural areas (two each in Kumshe and Banki in Bama local government area (LGA), a rural settlement of the Kanuris, and two each in Chuung and Shaffa in Hawul LGA, a rural settlement of the Buras) from March 1993 to January 1994.

The FGDs involved ‘young’ participants recruited from among parents aged 35 years or younger and ‘old’ participants recruited from among parents older than 35 years of age. The moderator’s guide in the FGDs was aimed at determining the concept of childhood illnesses involving diarrhoea, including its categorization and management, among participants, as well as their awareness, knowledge, and use of ORT/SSS. ORT knowledge for the purpose of this study was divided into knowledge of the action/function of ORT and knowledge of the preparation
of SSS (ratio of sugar to salt, quantity of water, etc.); for the former, descriptions such as that ORT 'replaces the salt and water lost from the body' or 'gives strength to the child with diarrhoea' were regarded as appropriate whereas descriptions, such as ORT 'stops diarrhoea' were considered inappropriate. The aspect of the FGDs related to ORT/SSS forms the basis for this report; the others are reported separately elsewhere (unpublished manuscript).

Results
All the participants were aware of ORT/SSS. The sources of awareness ranged from person to person enlightenment campaigns in the rural areas and broadcasts in the media to instruction given during clinic/hospital visits and church fellowship programmes.

Appropriate knowledge of the function of ORT was generally lacking among the Kanuris, especially in the rural areas, except among old women/grandmothers in the urban areas. The majority of participants among the Buras, irrespective of domicile, had an adequate knowledge. The reasons given by the Kanuris for their deficiency had some similarity in the urban and rural areas (Table 1); participants either viewed ORT as a prescription, the function of which they feel is not necessary for them to know, or declared outright that they were never told.

Both the use and knowledge of preparation of SSS followed the same pattern as the knowledge of ORT function; self-initiated use of SSS is usual among the rural Buras whereas rural Kanuris seemed to use SSS only if prescribed by the 'doctor'. Both ORT/SSS knowledge and reported use were seemingly related to the sources of information in the rural areas, both being apparently enhanced by women's church fellowship activities and hospital attendance among rural Buras. There were several variations in the menus for SSS preparation described by the Kanuris, especially in the rural areas, in contrast to the homogeneity among the Buras. Most of the preparations described by the Kanuris would result in concentrated or dilute solutions and separate menus were described for children and adults in some instances. Surprisingly, no participant in any of the FGDs among the Kanuris and Buras described tasting the SSS as part of its preparation.

Discussion
FGDs are a useful method of research into tropical diseases which enables the range of beliefs and practices to be explored. In that context, the findings of the present study has implications for the design of strategies to improve the home management of diarrhoea in Nigeria. The apparently universal awareness confirms earlier reports and suggests that unawareness is unlikely to be an important factor in the reportedly low use of ORT in the country.

In contrast to the universal awareness, there were sharp contrasts in ORT knowledge and use between the Buras and Kanuris. The difference can, perhaps, only be explained in terms of their contact with and acceptance of western education and medicine, both of which are longer and higher among the Buras. In this context, it is noteworthy that church-related activities were an apparently strong factor in promoting ORT knowledge and use among Buras in the rural areas. Crucial factors in ORT non-use among the rural Kanuris seem to be the lack of sustained campaigns in the rural areas, as well as a lack of knowledge of ORT function. Thus, the incorporation of education on ORT function should be viewed as a necessary part of ORT promotion campaigns. Methods need to be developed within the primary health care approach to initiate and sustain the training of rural communities in awareness and use of ORT rather than the present reliance on episodic person to person contact.

Quite unexpected was that no participant seemed to realize the need to taste SSS as part of the process of its preparation. It implies that the several unsafe menus described by the rural Kanuris would have the

<table>
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<td>Reasons advanced for lack of knowledge of ORT function by Kanuri participants in Focus group discussion</td>
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<th>Domicile/focus group composition</th>
<th>Reasons/explanations for lack of knowledge of ORT function</th>
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<tr>
<td>Rural dweller</td>
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<tr>
<td>Old men</td>
<td>'The doctors will know better about SSS'</td>
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<tr>
<td>Young men</td>
<td>'Only the doctors can tell; we were told to use it and have found it useful'</td>
</tr>
<tr>
<td>Young women</td>
<td>'Only the doctors can tell; we were just told to use it'</td>
</tr>
<tr>
<td>Old women</td>
<td>'That aspect is left to the doctors to bother themselves with'; 'it had been a long time when the officials taught us how to prepare it'</td>
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<tr>
<td>Urban dwellers</td>
<td>None</td>
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<tr>
<td>Old men</td>
<td>'It is the doctor's recommendation'</td>
</tr>
<tr>
<td>Young men</td>
<td>'We have never been told how it works or even its importance other than that it is a medication of diarrhoea'</td>
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potential of being a source of disappointment in use and a danger to the child with diarrhoea. Although it is not rare for home-made solutions to be improperly mixed,\textsuperscript{9,11} this skipping of the safety outlet on a large scale is worrying since its practice would have prevented the use of wrongly mixed and therefore potentially dangerous SSS. This is an area in need of emphasis in ORT campaigns.

In summary, ORT awareness in northeastern Nigeria seems unmatched by a corresponding appropriateness of knowledge of its function and SSS preparation and use. Differences in religion-based activities and education between ethnic groups appear to be partly responsible for the disparities. Programme designed to promote ORT use should incorporate education on its function as this appears to be an important factor in its use. Strengthening religion-based activities among both Christian and non-Christian populations is a seemingly potent method of ORT promotion.

References