

Treatment of Diarrhoea by Proprietary-medicine Vendors

A OJUAWO* AND OT OYANIYI**

Summary

Ojuawo A and Oyaniyi OT. Treatment of Diarrhoea by Proprietary-medicine Vendors. *Nigerian Journal of Paediatrics* 1993; 20: 41. Treatment of diarrhoea by 75 patent and proprietary medicine-store vendors in Ilorin, was investigated, using a questionnaire. The study revealed that 66.7 percent of those selling the medicines at the stores, were employees and of these, 30 percent were primary school children. Questions were seldom asked by the storekeepers, or the employees about the diarrhoea, nor was the child with diarrhoea asked to be seen for evidence of dehydration. Knowledge about the efficacy of oral rehydration therapy was totally lacking among the respondents in the stores. At all the stores that were investigated, drugs (*kaolin, thalazole, flagyl etc*) were recommended for the treatment of diarrhoea. Similarly lacking was the awareness of the seriousness of the condition and the need to refer cases to some medical centre. In the light of the present findings, there is a great need for the government to review the existing laws that regulate the establishment and functions of these proprietary medicine stores and also to update courses for the store vendors. A monitoring system to supervise the training of these vendors should be established.

Introduction

ACUTE gastroenteritis is a leading cause of morbidity and mortality during infancy in developing countries and dehydration is the major complication of the disease.¹⁻⁵ It has been shown that oral rehydration therapy (ORT) is an effective, inexpensive and affordable means of treating dehydration.^{6,7} The criteria for rational use of drugs in the management of acute diarrhoea in children, in addition to oral rehydration

therapy, has been set out by WHO.⁷ Despite these criteria, many parents usually patronize patent-medicine dealers first, for treatment of their children with diarrhoeal diseases. As this practice is, to our knowledge, common and widespread, the present study was undertaken in order to examine the management practices on diarrhoea, by patent-medicine dealers.

Materials and Methods

The study was carried out in the city of Ilorin, capital of Kwara State. A set of eight questions (Table I) designed by the authors, were used by seven assistants, comprising two medical students and five health sisters, who visited the patent-medicine stores in the city. At the visit to the stores, the assistants presented

University of Ilorin Teaching Hospital

Department of Paediatrics

* Consultant

** Senior Registrar

Correspondence: A Ojuawo

themselves singly, as parents or guardians of a child with diarrhoea. They then asked the questions as contained in Table I.

TABLE I
Questions and Responses obtained at 75 Proprietary-
medicine Stores about Diarrhoea

Question	Response			
	Yes		No	
	No	Percent of Total	No	Percent of Total
1 Is the storekeeper the owner of the shop ?	25	33.3	50	66.7
2 Did the storekeeper ask questions on diarrhoea ?	24	32.0	51	68.0
3 Did the storekeeper ask to see the child with diarrhoea ?	14	18.7	61	81.3
4 Was any advice given on ORT solution ?	10	13.3	65	86.7
5 Was advice given on the preparation of SSS ?	8	10.7	67	89.3
6 Was there ORT solution on the shelf ?	2	2.7	73	97.3
7 Was advice given on feeding/hygiene ?	15	20.0	60	80.0
8 Was advice given on the need to seek further medical advice if symptoms persist ?	15	20.0	60	80.0

SSS = salt sugar solution
ORT = oral rehydration therapy

On their return from the visit, the assistants entered the responses into the sheets containing the questions. Several weeks before the study started, these assistants had practised how to conduct the interviews with non-designated store-keepers, to ensure accuracy and reproducibility of the responses to the questions asked. The designated stores were selected by stratified

random sampling, taking into consideration, the number of stores in each of the areas of the city that had earlier been mapped out. Forty stores were randomly selected from the core indigenous Ilorin community, 30 from the non-indigenous area and five from those situated in the Government residential areas.

Results

The seven assistants visited 75 patent-medicine stores (8.7 percent) out of the 417 registered patent and proprietary medicine stores in Ilorin,⁸ over a period of two weeks. Table I lists the questions and the responses obtained. There were only 25 (33.3 percent) of the respondents who were the owners of 75 stores visited, while 50 (66.7 percent) were employees. It is of further interest that 15 (30.0 percent) of these 50 employees, were primary school children. There were 51 (68.0 percent) of the 75 storekeepers who failed to ask questions about the diarrhoea illness. Sixtyone (81.3 percent) of the respondents, did not ask to see the child with the diarrhoea. Regarding advice on the use of ORT solution and the preparation of Salt-Sugar-solution (SSS), negative responses, 86.7 and 89.3 percent, respectively, (Table I) were outstandingly more than the positive ones. All the store owners as well as the employees recommended antidiarrhoeal drugs. Drugs recommended at these stores for the treatment of diarrhoea are listed in Table II. Three of the storekeepers recommended a combination of two drugs, while 64 (85.3 percent) of the keepers recommended one drug. As can be seen in Table II, kaolin was the commonest recommended drug; this was followed by thalazole, metronidazole, tetracycline etc; in descending order. Two (2.7 percent) of the 75 medicine stores had oral rehydration solution (ORS) on their shelves.

TABLE II

Antidiarrhoeal Drugs recommended at 75 Proprietary-medicine Stores.

<i>Drug</i>	<i>Number of stores</i>
<i>Kaolin</i>	30
<i>Thalazole</i>	26
<i>Flagyl</i>	14
<i>Tetracycline</i>	12
<i>Diastop</i>	6
<i>Septin</i>	3
<i>Ampicillin</i>	2
<i>Enterosediv</i>	2
<i>Guanimycin</i>	1
<i>Diapec</i>	1
<i>Enterostop</i>	1

Discussion

Patent-medicine stores abound in the Nigerian society and they serve perhaps, as the first point of contact when a child is sick. It is at these stores that initial remedy is often offered to patients. These patent-medicine stores, as has been shown in the present study, are manned by persons who have no knowledge of diarrhoeal diseases *vis-a-vis* oral rehydration therapy. In this study, the owners of the stores comprised only 33.3 percent of the 75 persons who actually sold the drugs. Neither the owners nor their employees appreciated the need to ask questions about diarrhoeal diseases, or the need to see the patient in order to assess the child's general condition or the degree of dehydration. Majority of the employees in the stores lacked the basic knowledge of the efficacy of ORT and even the usefulness of the home-made SSS, as a remedy in the management of diarrhoea.

The basic advice on the need to feed with breast-milk, maintain good personal hygiene and good sanitation were lacking among the respondents in the stores. All the respondents recommended antidiarrhoeal agents and some of these even recommended an agent as the first line of management, despite their proven dangers and uselessness in diarrhoea.^{7 9 10} Widespread ignorance was demonstrated by a large number of the respondents who felt that management of diarrhoea ended with drug therapy and, hence they failed to give a simple advice that, if symptoms persisted, the child should be taken to a medical centre. From the results of this study, it is recommended that there is need to:

- Review the laws regulating the establishment and the running of patent medicine stores, paying special attention to the assessment of appropriate qualifications required for licensing.
- Enforce strict adherence to the relevant laws.
- Organize update courses regularly for patent medicine dealers.
- Intensify efforts to correct the attitude of patent medicine sellers to ORT both in the short and long term.
- Make new health education messages and materials available to this important group of health givers.
- Monitor the training, retraining and supervision of patent medicine dealers.

Acknowledgement

We are grateful to Mrs SB Ibrahim for typing the manuscript.

References

- 1 Readings on Diarrhoea. *WHO/CDD/SER/90.13*
- 2 Isaacs D, Day D and Crooks D. Childhood gastroenteritis: a population study. *Br Med J* 1986; 293: 545-6.
- 3 Ransome Kuti O. The problem of paediatric emergencies in Nigeria. *Nig Med J* 1972; 2: 62-70.
- 4 Kaine W and Okolie J. A review of the causes of hospitalisation as a guide to the pattern of disease in Eastern Nigeria. *Nig Med J* 1975; 7: 205-9.
- 5 Diakparomre MA and Obi JO. The pattern of paediatric emergencies in the University of Benin Teaching Hospital. *Nig J Paediatr* 1980; 7: 43-5.
- 6 Ransome-Kuti O and Bamisaiye A. Oral therapy of infant diarrhoea (letter). *Lancet* 1978; 2: 47.
- 7 A manual for the treatment of diarrhoea for use by physicians and other senior health workers. *WHO/CDD/SER/80.2, Rev. 2, 1990.*
- 8 Patent and Proprietary Vendors Licence. Pharmaceutical Inspectorate Divisions, Ministry of Health, Ilorin, 1991.
- 9 Walia BNS, Agrawal SM, Aggarwal KC, Panhotra BR and Manchada KS. Drugs in the treatment of diarrhoea. *Ind J Paediatr* 1980; 47: 323-7.
- 10 Portnoy BL, Dupont HL and Pruitt D. Antidiarrhoeal agents in the treatment of acute diarrhoea in children. *JAMA* 1976; 236: 844-6.