

# **Sources of Health Information Among Rural Dwellers in Africa: A Case Study of Two Ghanaian Villages**

by Kwadwo Bosompra\*

## **Abstract**

This paper examines the use, in Primary Health Care, of such information channels as conversation, the town crier, the market place, churches, schools, health officers, and the radio. The case study on which this paper is based showed that conversation was the most popular but least trusted source of health information. Radio came second both in terms of popularity and credibility, whereas the health officer was ranked third in popularity but first in credibility. Further, the study revealed that the awareness level of the respondents was generally low, and practical use of the knowledge acquired was minimal. On the basis of these findings, the paper questions the ubiquitousness of such traditional channels as the town crier, the market, and folk theatre in rural communication systems.

## **Résumé**

Cet article passe en revue l'usage, dans les soins de santé primaires, de canaux d'information tels que la conversation, le crieur public, la place du marché, les églises, les écoles, les agents de santé et la radio. L'étude des cas sur laquelle est basée l'article a montré que la conversation est la plus populaire mais la moins sûre des sources d'information de santé. La radio est classée seconde en termes de popularité et de crédibilité alors que l'agent de santé se trouve en troisième position en matière de popularité mais en tête en crédibilité. Par ailleurs, l'étude a révélé que le niveau de conscience des personnes interrogées était généralement bas et que l'utilisation pratique des connaissances acquises étaient minimales. Sur la base de ces conclusions, l'article remet en question la toute puissance des canaux traditionnels comme le crieur public, le marché et le théâtre dans les systèmes de communication ruraux.

\*Mr. Kwadwo Bosompra is a Lecturer at School of Communication Studies, University of Ghana, Legon.

Member states of the World Health Organization (WHO), Ghana included, have accepted the Primary Health Care (PHC) concept as the logical strategy for achieving the social goal of health for all by the year 2000. The countries are thus committed to ensuring that the mass of their people become aware of and use better means of preventing diseases and healthier ways of growing up. This brings into sharp focus the importance of public education.

The link between PHC and communication thus becomes obvious. Health information - about improved nutrition, clean water supplies, personal hygiene, family planning, vaccination services and treatment of common ailments and injuries - has to be communicated to the entire citizenry.

The majority of Africa's peoples reside in rural areas and the purpose of this study is to find out about the communication sources that rural dwellers - who are expected to be the major beneficiaries of the PHC system - use to obtain information about health issues. The study also looks at what the people know about diseases like cholera, and acquired immune deficiency syndrome (AIDS) and health related issues like oral rehydration therapy, treatment of water and mass immunization services.

A major benefit of this study is that it would help unearth the communication channels that would be most effective in carrying the PHC concept's preventive health message across to Ghana's ruralites. A number of studies have been done on rural health practices in Ghana but none of these has focused on how the indigenous or modern media systems can be used to transmit health information to the ruralites [1]. Thus this study would contribute to the bridging of this gap in the literature to which we now turn our attention.

### ***Related Studies***

Reviewing different studies on drug information, Lilja observed that studies of media preferences appeared to indicate that physicians were often the source of information about prescribed drugs, whereas pharmacists were the source most sought after for information about orally taken drugs [2].

Concerning general health education studies Lilja found that choice of communication channels was greatly influenced by the level of education with the better educated using impersonal (i.e. mass media) sources and the less educated relying more on interpersonal sources [3].



In a 1971 study, Fejer *et al.* concluded that the news media were the most popular sources of drug information for a general population of students [4]. They noted however, that the students's inclination to use drugs was an important factor affecting the effectiveness or influence of the information source: those students who did not use drugs relied on the mass media but drug users relied on their own experience or on friends [5].

A closely related study is that of Sinnet *et al.* which looked at the credibility of sources of drug information among students of high (secondary) school age [6]. They found significant differences among users and non-users in the sources they considered credible. For the drug abusers, law enforcement sources were the least credible (Policeman - 10.5%; Sheriff - 13.0%) while health authorities were the most trusted source of information for the non-users (Physician - 78.2%; Bureau of Narcotics and Dangerous Drugs - 75%). But by far the most credible source for the users was the user's own experience (86%). Sinnet *et al.* felt that the user's pleasure and lack of suffering may lead him to believe other drug education information.

Probably one study that is very closely related to our present study is the one undertaken by the School of Communication Studies, University of Ghana in 1975 on sources of information about selected national affairs topics in Ghana [7]. It was found that radio was the most popular source of information. This was followed by Government agents (Ministry of Information officials) newspapers and local authorities, in that order.

Concerning respondents' awareness of the selected topics, Operation Feed Yourself (89.2%) and Family Planning (73.9%) were by far the most familiar. Awareness rates for these topics were very high because they were the subjects of extensive information campaigns involving both the mass media and a number of governmental agencies. Whilst the campaigns could be said to have been successful in creating topic awareness, their success in communicating the officially correct concepts, however, were widely different.

The next most familiar topics were "General Gowon" (48.9%), OAU (38.8%), Low-Cost Housing (37.2%) and Dawhenya Irrigation Project (33.9%). The weakest topics, were the "Charter of Redemption" (24.4%) and 'Inflation', campaigns on which were just beginning in both the mass and interpersonal media at the time of the survey. Although 72.2% of respondents were aware of inflation, the authors contended that the high degree of awareness of the rise in the price of foreign foods was simply due to the practical nature of the topic. Information on inflation could be obtained directly without mediation.

However, its weakness lay in the proportion of respondents who



could correctly explain the meaning of inflation (8.3%). Figures for the other topics were Charter (9.6%), Dawhenya (11.5%), Housing (13.5%), OAU (20.4%), Family Planning (15.8%) and OFY (50.8%). The respondent's level of education influenced both topic awareness and the percentage of officially correct responses on the eight topics studied but it has a much smaller effect on the correctness of information about 'OFY' and Family Planning than on other topics.

On credibility of information sources, radio was trusted by far more Ghanaians than any other medium. The next most trusted source was Government agents. Conversation was least trusted. Probably we should point out here that as acknowledged by the authors, the questionnaires were administered by some Government agents (officials from the Ministry of information) and this could have introduced some element of bias in the responses.

Let us now look at our methodology.

## ***Methodology***

We were particularly interested in how respondents obtained information about cholera, a nationwide mass immunization campaign launched in 1986, AIDS, oral rehydration therapy and treatment of water.

The communication channels that we looked at included conversation, the town crier, the market place, church, school, meetings of committees for the defence of the revolution (CDR), vans of the Ministry of Information, health officers, newspapers and radio.

The survey was carried out in two villages in the Tongu District of the Volta Region of Ghana. The population of the villages, Vume and Flave - Kpotame, were 831 and 463 respectively [8]. Both villages are located along the Accra - Lome - Highway and have primary and middle schools. Vume has a primary health care centre whilst Kpotame has a government clinic. The people of Vume use water from the Volta River which is less than 200 metres away but at Kpotame the inhabitants rely on well water.

We took 10% samples of the two villages and interviewed 84 people in Vume and 46 in Kpotame. In both villages, we entered every other house and interviewed the first male and female adults that we saw. Where we did not meet both sexes, we talked to any two adults who were available. Out of the 130 questionnaires 125 were found to be usable, 80 from Vume and 45 from Kpotame.

The researcher was ably assisted by a research assistant who hailed from the area and spoke the local Ewe language fluently.

In this study, by sources of information we shall be referring to channels of communication through which messages concerning health issues flow to the inhabitants of the two villages.

We asked a number of knowledge-testing questions on the health issue that we studied and for each issue a respondent was marked "correct", when he or she was able to identify at least one of the constituent elements.

Let us look at these in turns.

**Cholera** - This was recognised by the frequent pale, watery and phlegmy stools and vomiting. In addition, the patient becomes weak and prostrate, his tongue becomes blue and he passes little or no urine. Cholera can be prevented by living in clean, hygienic surroundings, drinking clean water and eating wholesome food.

**Mass Immunization** - Children from 0-5 years and pregnant women were being immunized. The diseases that they were being inoculated against were diphtheria, poliomyelitis, whooping cough, tuberculosis, tetanus and measles.

**Treatment of Water** - Straining, boiling, filtration and the use of disinfectants and alum were marked 'correct'.

**Aids** - This is contracted through sexual contact with an AIDS patient or transfusion with an infected donor's blood.

**Oral Rehydration Therapy** - This refers to the treatment of dehydration due to diarrhoea or cholera. A respondent who mentioned the use of coconut juice, salt and sugar solution or oral rehydration salts was marked 'correct'.

We used *simple frequencies and percentages to analyse our data* and did some cross-tabulations to find out whether certain demographic factors could influence our knowledge variables.

## **Findings**

We begin this section by talking briefly about our sample characteristics.

Women constituted 56% of our combined sample. Again for the combined sample, 49.6% of the respondents had some formal education ranging from primary school to diploma awarding colleges while the rest had had no formal education. Overall our respondents' ages fell between 15 and 70 years with 51.2% aged between 15 and 35 years and 48.8% between 36 and 70 years.

Most of our respondents were farmers (48%), teachers (15.2%), artisans (10.4%) and traders (8.8%).

We turn our attention now to respondents' sources of information.



## Sources of Information

We had an opening question on sources of information about national affairs in general and the respondents showed the prominence of conversation (60.8%) and radio (60%). Two other sources, newspapers (24.8%) and the town crier (7.2%) were of minor importance.

Like information on national affairs, conversation was the most popular source of information on the health issues studied.

A look at Table 1 below shows that conversation was the major source through which information about cholera and treatment of water was received. It was the second most quoted source of information about AIDS and O.R.T., and the fourth in the 1986 mass immunization campaign. Conversation thus, recorded the highest mean percentage of 33.73 followed by radio (23.20%), health officers (20.23%) and the town crier (10.95%).

**Table 1**

*Percentage use of sources in hearing about the health issues*

	Cholera	Immunization	Water	AIDS	O.R.T	Mean
	%	%	%	%	%	%
Conversation	41.32	10.10	57.58	26.32	33.33	33.7
Town crier	2.48	52.29	0.00	0.00	0.00	10.9
Newspapers	0.83	0.00	0.00	3.95	1.11	1.2
Information Van	0.83	0.00	0.00	0.00	0.00	0.1
Radio	36.36	11.93	6.06	60.53	1.11	23.2
Market	0.00	0.00	0.00	1.31	4.45	1.5
Church	0.00	0.00	0.00	3.95	0.00	0.8
School	0.00	0.92	24.24	2.63	0.00	5.5
CDR Meetings	0.00	0.00	0.00	0.00	0.00	0.0
Health Officers	6.61	21.10	12.12	1.31	60.00	20.2
Posters		0.00			1.83	
E.W.A.	11.57	0.00	0.00	0.00	0.00	2.3
Others	0.00	1.83	0.00	0.00	0.00	0.3
TOTAL:-	100 (112)	100 (109)	100 (33)	100 (76)	100 (90)	100 (429)

E.W.A. means Eye Witness Account:

Radio was the most popular source of information on AIDS and health officers were the most quoted source of information on O.R.T.

The town crier was also the major source of information on the mass immunization campaign.

It was easily noticeable that each of the health issues had a major channel through which information was received. This is because emphasis was placed on different channels for the various health issues. For example, in the mass immunization campaign in the Volta Region, emphasis was on the traditional rulers in disseminating information about the vaccination in the villages. Thus, the town crier was the most important source of information. And with O.R.T., community health nurses played the major role in educating people and selling the therapy at child welfare centres.

Secondly, conversation's popularity as the source of information on all the health issues stemmed from the possibility that opinion leaders who have heard about health issues on the radio, from health officers or in school informed others through conversation.

This dominance of conversation is not surprising given the paucity of the modern media and the preponderance of traditional interpersonal channels in Africa.

This also explained why radio and conversation were the two most quoted sources on AIDS and Cholera, the two dreadful diseases in the study. The Government relied very much on the radio to inform and educate the people on the outbreak of such diseases.

**Table II**

*Least credible source of health information*

	Vume %	Kpotame %
Conversation	82.06	85.00
Town Crier	2.56	12.50
Newspapers	1.28	0.00
Radio	2.56	2.50
Market	6.41	0.00
Church	5.13	0.00
TOTAL:-	<hr/> 100 (78)	<hr/> 100 (40)

Despite the popularity of conversation as the most used source for the health issues, it was the least credible source in both



villages. And its levels of credibility in both villages were similar. (See Table II.)

That conversation was the least trusted source was a clear indication of the villagers' awareness of its use as a channel for idle gossip and rumour. Nobody believed its content.

From Table II, we notice that respondents in Kpotame considered the town crier as the second least credible source and in Table II they did not even mention it as worth believing. However, Vume respondents saw it as the third most credible source. (Table III)

**Table III**

*Most credible source of health information*

	Vume %	Kpotame%
Town Crier	7.50	0.00
Newspapers	2.50	2.27
Information Van	1.25	4.55
Radio	13.75	36.36
Health Officers	75.00	56.82
	<hr/> 100.00	<hr/> 100.00
	<hr/> (78)	<hr/> (40)

Both villages, as in the case of the least credible source, mentioned health officers as the most trusted source of health information and radio as the second most trusted source, but they varied in their percentages of trust. While health officers were trusted more at Vume (75%) than at Kpotame (56.82%), radio was less trusted at Vume (13.75%) than at Kpotame (36.36%). (Table III)

The position of conversation as the least credible but the most popular source of information revealed the absence of very credible sources through which rural dwellers could hear health information.

Thus they had to content themselves with the distorted information through conversation as the only guide to health information education.

***Knowledge of health issues:***

We started by finding out the percentage of respondents who had heard about each of the health issues.

Our percentage tables on the knowledge questions, therefore, excluded those who did not hear about each of the health issues.

Cholera and the 1986 mass immunization campaign were by far, the most familiar health issues heard by the respondents followed by oral rehydration therapy and AIDS in that order (See Table IV below):



**Table IV***Percentage of respondents who heard about the health issues*

Have you heard about .....	Vume		Kpotame	
	Yes	No	Yes	No
	%	%	%	%
Cholera	96.25	3.75	97.77	2.23
Immunization	90.00	10.00	82.22	17.78
AIDS	58.75	41.25	64.44	35.56
O.R.T.	72.50	27.70	71.11	28.89

We may explain the very high percentage of hearing about cholera to be the result of its outbreak in the area in the 1970s. And 11.57 per cent of the respondents were eye witnesses. (See Table I).

We may also attribute the popularity of the immunization campaign to, probably, the most important advantage of the town crier. That is, information was disseminated when most people were at home.

On the other hand, AIDS scored the lowest probably because campaigns were started only a few months before the survey. However, there was no marked difference between it and ORT. This could be because of its incurable and sexual characteristics. According to Allport and Postman (1946), "Sex, as a proposition for tropical interest, is a never failing target for rumour" [9].

**Table V***Knowledge of cholera symptoms*

What are two symptoms of Cholera?	Vume %	Kpotame %
Don't know	5.20	4.55
Wrong	0	0
Correct	94.80	95.45
Total	100 (77)	100 (44)

Responses to the knowledge questions on symptoms of cholera indicated in Table IV above showed very high levels of awareness and both villages did not differ much in their percentages of 'correctness'. However, performance on the prevention of cholera was low. Whereas Vume had 62.34 per cent, Kpotame scored 31.82 per cent.

There was a cholera outbreak in both villages about a decade ago, and this could explain the high levels of awareness. The low levels of knowledge about prevention of cholera is a rather sad commentary on the health ministry's efforts at public education on health matters.

**Table VI**

*Knowledge of diseases for the immunization*

What diseases are they vaccinating people against?	Vume %	Kpotame %	Average %
Don't know	56.94	70.27	61.47
Wrong	13.89	5.41	11.01
Correct	29.17	24.32	27.52
TOTAL:-	100 (72)	100 (37)	100 (109)

On the mass immunization campaign, 90.28 per cent of the respondents in Vume were aware of the age group of people vaccinated while at Kpotame it was 81.08%. Reference to Table VI above reveals that despite the high level of awareness of the age group, very few respondents knew of the diseases people were immunized against. In the combined sample, out of 27.52% 'correctness', only 4.58% mentioned between three and five of the six diseases; the remaining 22.94% had one or two diseases correct.

One may attribute the low knowledge about the diseases to the 50.4% illiteracy rate of the combined sample. On the contrary, this had no influence on the knowledge of the diseases.

It is likely that the failure of the town crier to give details of its messages may be the cause.

Or could we attribute it to the town crier's inability to interpret technical health information to a largely illiterate audience?

**Table VII**

*Knowledge about O.R.Ts. use*

What is O.R.T. used for?	Vume %	Kpotame %
Don't know	24.14	43.75
Wrong	0	
Correct	75.86	56.25
TOTAL:-	100 (58)	100 (32)



With the awareness level of the use of O.R.T. in both villages, we expected to find a higher percentage of 'correctness' at Kpotame than Vume because of the former's clinic and child welfare advantages over Vume but this was not the case (Table VII). However, they had similar percentages in using O.R.T. to cure diarrhoea (See Table VIII).

As shown in Table VIII below, the majority of the respondents treated their children who had diarrhoea with terramycine capsules, M and B tablets, codeine and herbs. It was also found out that the majority of those who were aware of the use of O.R.T. surprisingly used these tablets and herbs.

From Tables VII and VIII although 75.86% and 56.25% in both villages knew about ORTs use, only 41.54% and 41.03% respectively, actually used it to treat diarrhoea.

**Table VIII**

*Treatment of diarrhoea*

With what do you treat diarrhoea?	Vume %	Kpotame %
O.R.T.	41.54	41.03
Terramycine Capsule	41.54	23.03
M & B Tablets	6.15	12.82
Herbs	9.23	20.51
Codeine	1.54	2.56
	100	100
	65	39

NB: Data was collected irrespective of whether the respondent heard or did not hear about O.R.T.

It is worth mentioning at this point that education, sex, age and other demographic variables did not influence the 'correctness' or the practice of the health issues analysed above. Nevertheless, sex, age, and education had effects on hearing about AIDS.

Aids had the strongest influence (See Table IX below). Hearing about AIDS appeared to fall with increase in age. Put another way, young men and women were more likely to have heard about AIDS than old men and women probably because sexual immorality is more common with the youth than the aged. (The influence of sex and education on the hearing about AIDS is referred to in Table IX.)

**Table IX****Relating age to hearing about AIDS**

Have you heard about AIDS?	15-25 yrs %	26-35 %	36-45 %	46-55 %	Above 56 %
Yes	99.91	80.95	55.00	25.00	30.00
No	9.09	19.05	45.00	75.00	70.00
T O T A L:-	100 (22)	100 (42)	100 (20)	100 (20)	100 (20)

$$X^2 = 13.42 \quad 4 \text{ degrees of freedom } P < .05$$

Though only 58.75 and 64.44 per cent of the respondents in Vume and Kaptome heard about AIDS, their awareness level was encouraging. Between the two villages, Vume was more aware (89.36%) than Kaptome (75.86%). It was assumed that the greater the population in a settlement the more likely would be their awareness of AIDS. This is because immorality tends to be higher in bigger than in smaller settlements.

Results about the treatment of water had been very poor considering the most serious health problem in the area. Bilharzia was the most serious health problem at Vume, while at Kaptome it was the second. (See Appendix D). Surprisingly, at Kaptome more people treated their water before its use (60%) than at Vume whereby only 7.59 % of the respondents treated their water.

### **Summary and Conclusion**

*This paper set out to find out about the communication sources that inhabitants of two Ghanaian villages relied on to obtain information about health matters.* It also looked at what the people knew about cholera, AIDS, oral rehydration therapy, treatment of water and a mass immunization campaign launched by Ghana's health ministry. The knowledge measures were cross-tabulated with demographic variables like education, age and sex.

We found that conversation was the most popular but the least trusted source of health information. This appeared to underline the absence of very credible sources within the villages' communication set ups through which the inhabitants could gather information on health issues.

Radio was the second both in terms of its popularity as a source of health information and also its credibility. The health officer was the most trusted source and the third most popular. Sources like



the church, market place and newspapers played very insignificant roles.

Furthermore, our study revealed that the awareness level of the respondents was generally low. *There was equally a low practical use of knowledge gained.*

In broad terms, our findings appear to cast some doubts on the professed ubiquitousness of such traditional channels as the town crier, the market place and the folk media/theatre in the rural communication system.

In an indigenous communication system such as obtained in our rural areas, one would expect at least the town crier or gong man to be one of most frequently cited sources of information on most issues not excluding health.

We admit that when respondents mentioned conversation as a source of information we did not probe to find out where exactly this conversation took place and with whom. In fact another study which we will undertake shortly, will address this particular shortcoming.

In the mean time, given the high credibility rating accorded radio, and our rural dwellers often quoted dependence on the traditional media, it appears there is no other option than to call for a careful blend of the traditional and modern media systems for the dissemination of messages in such vital areas as matters relating to health. That way we stand to reap the best from both systems.

## REFERENCES

1. Examples include (a) *Health Care, Health Services and the Rural Community*. A report to the Government of Ghana, Vol. 1 IDS Health Group, Institute of Development Studies, University of Sussex, Brighton, Sussex, in collaboration with, ISSER, University of Ghana, Legon, Ministry of Health and Department of Community Health, Korle Bu, Ghana. (b) Newman Alfred K., Wurapa Frederick K., Lourie Irvin M. and Ammah Samuel Ofori. "Strategies for strengthening health services infrastructure: A case study in Ghana." *Social Sciences and Medicine*. 13C, 1979. (c) A number of published and unpublished works on the Danfa Project administered by the Ghana Medical School and the School Public Health, University of California, Los Angeles.
2. Lilja, John. "The Evaluations of Drug Information Programs." *Social Science and Medicine*, Vol. 21, No. 4 1985. pp. 407-415.
3. *Ibid.*

4. Fejer, D. Smart R.G., Whitehead P.C. and Laforest L., "Sources of Information About Drugs Among High School Students," *Public Opinion Quarterly* Vol. 35 No. 2 1971 pp. 235-241.
5. *Ibid.* p. 240
6. Sinnet, E.R., Press A., Bates R. and Harvey, W. "Credibility of Sources of Information about Drugs." *Psychology Report*. 36, 1975, pp. 299-309.
7. School of Communication Studies, University of Ghana, Legon. "Sources of Information on National Affairs Topics." Unpublished.
8. *1984 Enumeration Area Population*. Volta Region, Population Census Office, Accra, 1984.
9. Allport, Gordon and Leo Postman; "An analysis of Rumour," *Public Opinion Quarterly* Vol. 10 1946 p. 509.