

The Difficulty Of Conveying Drug-Related Messages To The Lay Community: A Case Of Posters In Uganda

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In an effort to impart information about the correct use of drugs among the population, the Ministry of Health assigned the Uganda Red Cross Society the role of providing public health information in connection with the essential drugs programme. The Society then incorporated the use of posters as one of the communication channels. The assumption was that they would reach a larger part of the population since there is acute shortage of health workers, and access to radio and television is deficient. In addition, posters are both cheap to produce and fairly easy to distribute.

This survey assessed what potential existed in the posters for addressing the misuse of drugs by the community, using the following criteria: coverage (how many of the patients have seen the various posters), appropriateness (how people understand the message when they look at the posters) and effectiveness of the training on how to use posters (how people understand the message in the poster) . The result of the survey shows that posters are not very effective for communicating health-related messages. They were not easily understandable and at times they convey totally wrong information when pictures are viewed without accompanying text in the appropriate language(s).

Key words: Community, posters, message, drugs, misuse.

INTRODUCTION

Starting in the mid-eighties the Uganda Essential Drugs Management Programme (EDMP) helped to improve the supply of drugs to the country. In 1985 it began to supply drug kits to government health units throughout the country [1]. The result of this is that now the critical issue about drugs in the country is not its availability. It also played a big role in the establishment of the National Drug Authority in 1993 to regulate the importation, distribution, quality and supply of drugs. But in spite of this existing regulatory control on drugs, misuse of drugs by the community still persists. We have previously documented that 69% of treatments for fever, cough, worms and diarrhoea were made

through self-medication using all types of drugs [2]. Secondly it was found that only 23% of all drugs used came from the non-profit facilities that receive essential drug kits and are the object of planned efforts to improve prescribing habits. This is however not surprising, for regulatory control only make sense when there is enough manpower and other resources to implement policies. In Uganda there is a big population-to-doctor ratio of 23,000:1 [3]. The few-trained manpower available is not able to control the distribution and use of drugs. In terms of financial resources, Government of Uganda spends only 3% of its GNP [4], so the few people accessible do not put in maximum time possible because they have to look for extra money to meet basic needs elsewhere. For this

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reason other ways are being tried to promote health care in the population. These include the training of Traditional Birth Attendants [5], supplying a specified list of drugs and a revolving fund to the community to support the supply of these drugs [6]. A more pragmatic approach to empower the community with sufficient knowledge to take charge of their own health was the dissemination of information to the public by the Uganda Red Cross Society (URCS) through the production of posters, pamphlets and booklets. URCS also used mass media (radio and video shows), and trained drama groups, songs and poems to pass on the message on the proper use of some selected drugs.

On the posters as well as on the pamphlets and booklets, the health message portrayed therein touched on issues like poor storage, self-medication, over and under dose. The posters advise on safe storage of drugs, proper use of capsules and avoiding untrained health workers. They warn consumers against, use of injections, sharing of medicine and, use of expired drugs. The posters were supposed to be hung on the walls of the health units so that the patients look at them and learn while waiting for treatment.

Although there are other programmes which exist in the Ministry of Health for proper use of drugs for the specific diseases like the Malaria (Malaria Control Programme), Diarrhoea (Control of Diarrhoea Diseases) and Tuberculosis (Communicable diseases Programme) [5], posters by the URCS were seen as more likely to reach a comparatively larger population and principally cover more drugs than these other channels. For this reason we decided to evaluate the posters, even though the population able to read is small.

MATERIALS AND METHODS

Evaluation methods

The potential for posters as good com-

munication channels for health-related matters was evaluated in relation to how consumers understand the message in the posters and whether they agree with these messages, using the following criteria:

- Coverage: How many of the respondents have seen the various posters.
- Appropriateness: Are the posters in line with the set objective?
- Effectiveness: How are the materials on posters understood by the patients? In other words, what do people see when they look at them, do they understand the message?

In-depth interviews with consumers, using structured questions were carried out. Seven posters addressing the following issues were identified: warning against self-medication; warning against the use of injections; advising on how to use capsules; warning against sharing of medicine with others; informing on how to store medicine safely; warning against overdose and warning against the use of expired drugs. Copies of these posters were carried into a doctor's consultation room where respondents were asked one by one, to identify them. The questions asked were as follows: have you ever seen this before? Where did you see it? What do you see in the picture? What is the person in the picture doing? What is the person in the picture saying? Do you agree that is what is always done? What do you learn from the picture? Have you ever done what is being done in the picture? What should be done to avoid some of the problems highlighted in the picture? Secondly key-informant interviews were done with health workers to solicit their views on the posters.

Respondents

The participants were women randomly chosen from those attending antenatal clinics and those who brought children for immunisation at various health units. In total

83 women participated in the interview. Secondly the staff, ranging from nursing orderlies, nurses to Medical Assistant (Clinical Officers) at these health units participated in the survey as key informants.

The setting

This work was done in Mbarara district south west of the country. It has 4 hospitals 5 health centres and other units making a total of 43 facilities [2]. Out of these facilities ten rural units were selected after establishing that posters, of different types are placed in open areas where patients can easily notice them. Eighty-three interviews were performed with women in such places.

Posters

The size of the posters was A2. They were printed in black, white, blue and red colours, and the language used was English. Each poster consisted of 2-3 framed pictures, which blended together into a story to inform the viewer what happens when one either uses a drug in a wrong or right way.

Collection of data

Answers to the questions were recorded and manually analysed qualitatively.

Consumers' perspective

Out of 83 participants, only 18% read and understood English, but had problems in understanding the meaning of the words on the posters, 60% read and understood the local language (the 18% who read, but did not understand English are among these) and 22% were illiterate. The result of the in-depth interviews with women are summarised in table I. As seen in the table the use of posters as information and education material was unsatisfactory.

- More than half of the participants had never seen the posters before, although they actually are distributed to health units all over the country.
- More than half of the participants were not able to understand the messages on the posters correctly (except the posters warning against over-dose and informing about proper storage).
- The messages on the posters are either not consistent with consumers' ideas about drug safety and efficacy, or even though the participants claim to accept the message they feel there are problems in actually following the message, with the exception of the poster on safe storage.

RESULTS

Table 1: Perception and coverage of URC posters according to 83 respondents

| | Coverage | understands | Does not understand | accepted |
|------------|----------|-------------|---------------------|----------|
| | % | % | % | % |
| Self-med | 22 | 24 | 76 | 60 |
| Injections | 24 | 23 | 77 | 23 |
| Capsules | 10 | 28 | 72 | 63 |
| Share med | 22 | 25 | 75 | 63 |
| Storage | 12 | 87 | 13 | 4 |
| Over-dose | 13 | 89 | 11 | 8 |
| Exp. Drug | 11 | 39 | 61 | 39 |

The poster warning against self-medication

Just over twenty percent (22%) of the women had seen posters before (3 persons had seen posters in a private clinic, 3 in a government dispensary, 4 in a NGO-hospital, and 3 did not remember where they saw it). 78% had never seen it before. Twenty-four (24%) were able to understand the poster, while 76% did not understand the meaning. After discussing the message of the poster the participants in general claimed to accept the message, although 60% still argued they had problems in following the message.

The poster warning against the use of injections

Twenty four percent (24%) of the 83 women had seen this poster before (3 persons in a private clinic, 2 in a government dispensary, 7 at the health unit in the same morning where used in a health education session, one participant used it at home as a decoration, and the rest did not remember). 76% had never seen it before. Twenty three percent understood the message very well, while 77% did not understand the meaning. 23% of the women did not agree on the message after discussing it.

The poster advising on how to use capsules

Ten (10%) had seen the poster before (2 persons in a private clinic, 2 in the health unit in the morning where it used in a health education session, and 4 did not remember where). Ninety (90%) had never seen it before. 28% understood the message on the poster very well, while 72% did not understand the meaning correctly. 63% felt they had problems in following the message, although some of them claimed to believe the message.

The poster warning against sharing medicine with others

Twenty two percent had seen the poster before, 4 in a NGO hospital, 1 used it as decoration at

home, and 8 did not remember where). 78% had never seen it before. 25% were able to repeat the message correctly, while 75% did not understand the meaning of the poster.

The poster informing on how to store medicine safely

Twelve percent (12%) had seen the poster before. 88% had never seen it before. 87% understood the message very well, while 13% did not understand the meaning of the poster. Only 4% felt there were problems in following the message.

The poster warning against overdose

Thirteen percent (13%) of the respondents had seen the poster before, 5 at the health unit the same morning where it was used in a health education session, 2 in a NGO hospital, 2 in a government dispensary, and 2 did not remember). 87% had never seen it before. 89% were able to repeat the message correctly, while 11% did not understand it. Only 8% of the women felt they would have problems in following the message.

The poster warning against the use of expired drugs

Eleven percent (11%) of the 83 respondents had seen the poster before, (7 persons at the health unit the same morning where it was used in a health education session, and 2 did not remember). 89% had never seen it before. 39% understood the message very well, while 61% were not able to repeat the message correctly. 39% claimed there were problems in following the message.

As for the low coverage, in very few cases the participants have seen the posters in a health unit, or have observed the posters being used as teaching medium. In many cases where a poster had been seen before, the participants said they saw them in private clinics, or at education sessions organised by health workers. In addition, where participants had seen the poster in a health unit they often made comments such as:

"Yes, I saw it on the wall, but I did not pay any attention to it. You see, when you go to the hospital you are very sick and worried, so there is no energy for anything apart from getting treatment. It is better they teach us about it".

It is also possible that, some might have seen some posters, but simply did not pay attention, because the meaning of the poster was not understood, or the message is not appealing. Concerning the understanding of the messages portrayed on the posters a few examples of the comments from the participants will be given in order to illustrate what the problems might be: In most of the cases respondents perceived the messages in the posters in direct opposite to what was intended. For example regarding:

The poster warning against self-medication

"This picture tells us how we usually do it. If you are sick you have to take action to recover, for example you can go to a shop and buy medicine as this man on the picture. If he then feels fine its ok, and if he is still sick he must go to the hospital". "The pictures show how you can treat yourself".

The poster warning against the use of injections

"I think this man must be very sick since he needs both injections and tablets". "They want to show us that tablets are not enough, they need to be followed by an injection". "It shows us that injections are more powerful than tablets, you see the injection is bigger than the tablet".

The poster informing about the proper use of capsules

"I think the picture tells us that when you have such a wound you wash it, put a drug on it, and bandage it, and then you start swallowing the drugs". "Yes, this shows us

how we do it when you have such a wound. You put on a drug, I think it is double-colour, isn't it? And then you wash and bandage it too".

The poster warning against sharing of medicine

"I see a lady giving medicine to people, is she a nurse? On the next picture they have not yet received any drugs, they look very sick, and the lady swallow some medicine. It tells us you should swallow tablets with a glass of water". "It tells us how to take drugs in a proper way, with a glass of water".

DISCUSSION

Since it is difficult to measure the effect of posters on peoples' behaviour in relation to drug use, we focused on the coverage (how many people have seen the posters), the use of the posters (are they in line with the set objectives), the way the posters were understood by the community (what people saw when they looked at the posters and how they understood the messages) and whether people accepted the messages.

From the findings it is obvious the pictures do not speak for themselves. If people are not able to read and understand English, they do not understand the posters correctly. The findings show that pictures are understood in a context: people relate the pictures to the world they know. When people do not understand the language, which accompanies the pictures, the pictures tend to symbolise their actual drug use behaviour, because people relate what they see to their own experience and perceptions. Sometimes the participants said: "It teaches us how to use medicine", but they did not exactly understand in what ways. The difficulty in understanding the posters was in most cases related to the participants inability to read or understand English. When the posters were used as teaching aids, most participants understood

clearly. This indicated that correct understanding increased when the pictures are combined with verbal explanations. Labrecque *et al* [7] found that the presence of posters in the waiting room had no impact on tetanus immunisation in a Hospital in Canada. Other workers, Kolasa *et. al* [8] and Mead *et. al* [9] found that posters were in-consequential message carriers when used alone.

A few participants however said they were confused by the many persons on the posters. They could not determine whether the persons were the same in the different sections of the posters. It is needless to say that the visual impact of the exhibit is important in attracting attention and conveying content to the reader. Rankin *et al* [10] have described the production of an elegant poster by colour laser imager which proved attractive to the viewers. Another problem was that quite often people do not connect the 2 or 3 pictures on a poster to a "story". Instead many see the pictures as separate events. And it was clear that some did not recognise the symbols on the pictures. This was for example the case with the label "shop", which should indicate an unqualified provider. Some other articles did not confer the imagination they were intended to: it was not understood that a uniform or instruments used for diagnosing should indicate a health unit or qualified health workers; the prescription envelope on the poster warning against sharing drugs with others was not related to the wrong way the women actually handled the medicine. This might be due to the poor use of the envelopes at the health units - people simply do not know what it is.

The practice of pouring the content of capsules on the wounds, pounding antibiotic tablets and pouring it onto wounds, or mixing it with Vaseline and smearing it on infected eyes was believed to be correct medical behaviour. In addition taking an over-dose "*because of too much pain*", or stopping treatment when one feels better were found to be common practices. These medical behaviours are due to habits and popular knowledge. In general people are

willing to change their behaviour if they see some advantages in doing so. The researchers noted interest among the participants to learn new ideas, and also to a certain extent a willingness to change medical behaviour, when we discussed the problems of using a drug in a biomedical incorrect way.

What was observed to be much more problematic was that the messages of the posters in general are not consistent with the actual drug supply situation, and that many people therefore felt it was impossible to follow the ideas. Take for example the poster advising patients to consult health workers when sick, when one of the major problems was accessibility to health units and professional health workers.

"How can you expect me to walk 20 miles when I am very sick, or when my child becomes sick in the middle of the night?"

"Do not use expired drugs" was another paradoxical message. By all known standards it is very difficult to tell by looking, whether a drug is expired or not. And besides, people said it was very difficult to check if they received expired drugs, either because the medicine could just be replaced in new tins, or because they could not find or read the expiry date on the packet. On the other hand, people were not worried about buying medicine in drug shops or clinics, because they are often owned by trained medical personnel. Their major concern in this context was the problem of buying medicine at markets, where the drugs are exposed to the sun. Even then people living in rural areas with poor access to health facilities feel it is better to buy medicine at markets than not buying at all.

As for sharing medicine, the participants said they were forced to either because of lack of money, or because they might find more sick people at home when they go back after a long day waiting for treatment at the hospital. So they felt a little medicine is better than nothing. Two of the posters were easy to grasp by the participants: Those concerning

information about proper storage, and warning against overdose. Most people said they understood the message just by looking at the pictures. This is because the pictures are simple (for example the message is illustrated by only one person and it is clear it is the same person throughout the poster). The symbols are also clear and well known (a spoon, clearly indicating X 2; a baby pouring medicine, swallowing it and becoming sick). These posters were therefore less confusing than the other posters, although the language was not clearly understood. Additionally many people related the pictures to their own experience. For example, a woman said she used to overdose and store medicine poorly, until she experienced death of a neighbour's child and another time witnessed increased sickness as a consequence of taking many tablets of a drug. Her habits henceforth changed.

CONCLUSIONS

The posters do not seem to contribute to a more appropriate use of drugs among consumers, because they do not speak for themselves. The messages in general do not relate to the actual situation on the ground, and because they are not used in health education. The following is therefore recommended:

- Use local languages to improve the understanding of the posters
- Use the posters in a teaching context.
- Include explanations on how to use the posters on the back of each poster.
- Provide positive instead of negative messages. "Do not self-medicate", "do not go to unqualified health workers" etc, seem inappropriate because those are actually the possibilities many people have for medication. Education material would have more effect if it were adjusted to the possibilities and

behaviour of people, for example by giving positive messages.

ACKNOWLEDGEMENTS

This was a part of an overall collaborative study covering four developing countries. The work in Uganda was financed by DANIDA. Initial financial support for this research work was provided by EEC Grant. The authors are grateful for these bodies. We also acknowledge the contributions of the DMO and other district officials in Mbarara District.

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