

Editorial: Should medicines be kept away from children? African considerations

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keywords medicines, children, safety, self-treatment, education, antimalarials, Africa

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Medicines often carry a warning: 'Keep away from children'. Who are these children? How old are they? The warning assumes that children do not know the difference between a sweet and a pill, or between lemonade and medicinal syrup. It assumes that children's knowledge and responsibilities are, and ought to be, different from those of adults, based upon a concept of childhood as fundamentally different from adulthood, and of medicine as a domain of experts (Geissler *et al.* 2001). This concept is historically and geographically specific, originating in 19th century Europe, and its validity cannot be assumed to hold true for, say, rural Africa at the beginning of the 21st century.

Children in rural African households may have a low position in the domestic hierarchy, but they participate in most activities and are given considerable responsibilities early in life. In this sense, rural African children are far more adult than children of the same age group in Europe. Their status as a child is marked by more peripheral participation in vital daily activities, but not by exclusion from them (Weisner *et al.* 1997). They do important work in the house, such as looking after younger brothers and sisters, fetching water or firewood, and cooking. They know how to behave and can keep secrets like adults. They also participate in the collection and preparation of herbal medicines and are sent to buy pharmaceuticals (Sternberg *et al.* 2000; Prince & Geissler 2001; Prince *et al.* 2001). Handling medicines is a sign of being a responsible person at a young age, and it underlines the fact that medicine and treatment are not seen as an exclusively expert domain, but as a field of practice to which all responsible persons, including children, can contribute.

Self-help

Health planners and officials long ignored the fact that people in rural African communities often prefer to

purchase their own medicines from drugstores and ordinary shops because these shops are nearer to them – not only geographically but also in terms of social bonds – and because they have medicines which hospitals and health centres fail to deliver. People argue, very rationally, that they may as well go straight to the shops instead of first going to a hospital where they only receive a prescription.

By now, most of us are aware of the fact that people help themselves in order to cope with daily health problems such as malaria, diarrhoea, respiratory tract infections, hookworm, eye problems, skin infections and gonorrhoea. On the one hand, this is a result of the more open and equal way in which people use herbal medicines, which are known, prepared and used mostly within domestic groups. On the other hand, self-help is a response to the malfunctioning public health system. Instead of ignoring these practices, health planners are now increasingly making a virtue out of necessity and designing programmes to teach people how to improve them. Thus, in Kenya, shopkeepers are being trained in the appropriate use of common medicines and in communicating their knowledge to customers (Marsh *et al.* 1999; Van der Geest 1999). Despite the initial concerns about training lay people in an expert domain like diagnosis and treatment of illness, the first trials have been successful in improving community drug use practices, and the approach is being expanded to other areas in Kenya.

These trials involve adult lay people. But, if in fact children are already engaged in using specific medicines for certain diseases, would it not be realistic to teach them how to do this properly, how to avoid overuse and under-dosage of drugs and to inform them of the dangers of certain medicines?

Schools

The suggestion raises a lot of questions: Who should teach them? Where? At which age? Which diseases and medicines should be included? It seems obvious that schools would be the most convenient place, but is it appropriate, given the context of existing school health education, and teachers' as well as parents' expectations and attitudes towards schooling? In today's rural Africa, schools are often uninspiring to both children and teachers. Teachers are frustrated with their working conditions and the lack of material and professional support from the government, especially in the wake of recent 'adjustment' programmes. Teacher training and continuous education programmes are insufficient, and teachers' career possibilities very limited. At times this leads to neglect of teaching duties and harsh treatment of children. But there are more positive examples of teachers as role models who take pleasure and pride in their educational work and who could teach children about the use of medicines against the most common diseases.

This would require special courses in teacher training, and long-established curricula would have to be adjusted. The teaching of medicines seems to fit best within home science, but this subject has a low priority in many educational systems. Medicine use should be taught in a participatory manner and the topic should be didactically connected with the children's everyday experience. This, again, poses an obstacle, as participatory methods are uncommon in most educational systems in sub-Saharan Africa, which in many cases still bear the marks of their colonial origin (Meinert 2001).

Parents who may not have been to school themselves are usually very supportive of their children attending school. They want them to learn and attain a better life, and they might be interested in the knowledge their children acquire in school; hence children could be transmitters of medicinal knowledge to their parents and the wider community. On the other hand, parents' expectations about schooling might pose an obstacle. School is expected to convey skills such as reading, writing and Maths, while everyday practices, particularly issues related to the body and health, are seen as a family domain. Education about medicines, as well as other action-orientated, skill-based subjects, would require a gradual change of parental expectations and in general, overcoming the divide between school and 'real' life (Meinert 2001).

What about the children? Most children in primary school are passive learners because the system makes them so. Teaching methods are hierarchical and top-down, and the lack of teaching materials makes learning cumbersome. Despite the fact that corporeal punishment is forbidden by

law in many African states, such legislation has often not affected the way in which teachers discipline their students in rural areas. Some teachers beat children and make them carry out extraneous tasks. Despite this, most children like to go to school: it is an escape from the many chores at home and gives them the opportunity to be with peers. Moreover, school, however ineffective, is still regarded as the gateway to a successful future.

Health workers may, at first, be against the idea of teaching children how to use medicines. They may look at it from the formal biomedical perspective that medicines should be kept out of the hands of children. They may also see it as an encroachment on their professional domain. The best way to get their cooperation is probably to involve them both in the teaching of the teachers and of the children. After all, teachers are already engaged in educating their pupils in preventive medicine. Educational authorities may also be reluctant to embrace this new idea for various reasons. They may share the official view that medicines are not children's business, and they may also object to adding to the teachers' workload and to extending already crammed curricula. But they might be susceptible to the idea that teaching medicine use offers an opportunity for an interactive style of education which builds upon the children's daily experience. Health education may thus contribute to a renewal of teaching in general through a skills-based participatory approach.

Teaching what to whom?

The question that remains is what should be taught to which children. Medical and pharmacological participants of a conference on 'People and Medicines in East Africa' in Mbale, Uganda some years ago (Geissler & Meinert 2000; Van der Geest 1999) suggested that teaching of medicine use in schools could start from standard four, which is at the age of 10–12. Medicines whose use is to be taught should be restricted to those for simple malaria, cough and cold, simple diarrhoea, including light painkillers and eye ointment. Teaching should include and use as the point of departure – herbal medicines, as it would enhance the willingness to learn by starting from what pupils already know, rather than from their supposed ignorance, and it would integrate the everyday experience of the pupils and their parents. The participants at the Uganda conference emphasized that preventive health education should remain the main issue in school programmes and that classes on medicine use should be integrated in preventive health.

Apart from the concerns of medical professionals, any approach to teaching medicines at primary school level must ensure that medicines – especially particular brands – are not promoted in school. On the contrary, critical

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awareness of the dangers and risks of medicines, and of the economic relations around the production and distribution of pharmaceuticals must be created. Not *more*, but *more appropriate* use of medicines must be the goal of medicinal education. At present, two studies are underway in Uganda and Kenya which prepare for trials of school-based education about the appropriate use of antimalarials (Geissler *et al.* 2002; Xabagasani & Meinert 2002).

In conclusion, teaching medicine use to children in schools seems worth trying, as it could enhance appropriate use of medicines in the community. Moreover, it would be a clear sign of taking children seriously as agents in their own right and of turning schools into institutions that prepare children for life.

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