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Health System Strengthening: Role of conditional incentives?

Incentives for medicine distributors in Home-based management of malaria programmes: An overview of TDR experiences

"… and time is money"

Von Franco Pagnoni

Prompt access to effective malaria therapy needs to be greatly improved if the Millennium Development Goal of reducing malaria-related mortality is to be met. To achieve this goal, delivery of antimalarials through community health workers (CHWs) is crucial. However, an important challenge is to maintain motivation and to limit attrition of CHWs. This paper presents different options for incentives for CHWs, based on implementation research projects supported by WHO/TDR.

Prompt access to effective malaria therapy is still low for the majority of the populations at risk, particularly in remote areas of malaria-endemic African countries. Home-based management of malaria (HMM) is considered as a major strategy to improve prompt delivery of effective malaria treatment in Africa. The strategy involves treating febrile children with easy-to-use, pre-packaged antimalarial drugs distributed by trained members of the community (Fig 1). HMM has been shown to have an important effect on malaria mortality and severe morbidity. In Ethiopia, a programme to provide home treatment for malaria reduced all-cause mortality by 40% and malaria-specific mortality by 3 times (Kidane, Morrow 2000); in Burkina Faso, prompt treatment of children with uncomplicated malaria with pre-packaged antimalarials reduced progression to severe malaria by 50% (SIRIMA et al., 2003). HMM is well accepted by the communities, who perceive treatment to be effective in the vast majority of cases (Ajayi 2008).

One opinion leader in Dededo, Ghana, said: "Travelling to buy the medicine involves transport cost and then paying for the medicine. If the drug is close to you it reduces expenses for child care."

A mother in Ona-Ara, Nigeria, said: "The change is that, previously, when children fall sick, we take some time to look for money and walk all the distance to go to the hospital. Sometimes before we get there the child's condition becomes worse. If you are lucky to get to the hospital

early, after treatment you walk the same distance back or referred to the big hospital. The unlucky ones either die before they get to the clinic or die at the clinic."

The challenge

However, a major challenge needs to be addressed to support the much-needed expansion of access to effective antimalarial treatment through HMM. Mechanisms of incentivating community medicine distributors (CMDs) need to be developed to retain CMDs and allow them to deliver the service over time. In most HMM programmes CMDs are volunteers, who provide care to the members of the community in exchange for small una tantum non-monetary incentives, sometimes complemented by a small monetary remuneration - in the order of 2 to 5 US$/month (Fig. 2). This approach has often resulted in a high attrition rate of CMDs, with many CMDs abandoning their job after a period of time. In Uganda, a drop out rate of up to 16% was observed after 18 months of service (BASICS, Final report, UGA).

An opinion leaders in Akrofu, Ghana, said: "As I said the first is the allowance to be given to the distributors so then, they can concentrate for instance the next distributor who is a lady left because there was nothing to gain so if Mr. Agriki had not been with us to this time it will not be beneficial to us, the motivation is important."

A CMD in Ho, Ghana, said: "You spend time in looking after a child, sometimes 30mins or 45mins, or even 1 hour and that is spending time, and time is money. I'm going to pay rent; I have to pay for electricity."

Options for CMDs incentives

While it has become increasingly clear that systems for creating incentives for CMDs need to be put in place to reduce attrition and improve performance, the debate is open as to which approaches yield the best results. Community financing of CMDs has been largely advocated, but almost no examples of a sustained form of this exist. Furthermore, no study has been carried out to compare the effectiveness of different options for providing incentives against a given set of outcome measures. Below, some examples are described from experiences collected as part of projects supported by the UNICEF/UNDP/World Bank/WHO Special Programme for Research & Training in Tropical Diseases (WHO/TDR).

Monetary and non-monetary incentives: Incentives for CMDs fall under two broad categories: monetary and non-monetary incentives. In countries that adopt cost recovery schemes – like Burkina Faso, Mali, Senegal and others – it has been possible to allow CMDs to retain part of the revenues of drug sales. A first stock of drugs is given for free to the CMDs and a revolving fund is created; CMDs replenish their stock buying the drugs at a reduced price. In other countries, where the policy is free distribution of antimalarials, options include payment of monthly salaries to CMDs, of allowances for participating in meetings, or reimbursement of transport fees. In some cases CMDs are allowed to charge patients a

consultation fee, variable between 0.2 and 0.5 US$. An innovative option for incentivating CMDs tested in some countries is providing them with commodities at a reduced price (e.g. ITNs) that they can re-sell for a profit.

Non monetary incentives – such as of bicycles, boots, T-shirts, watches, raincoats, torches or certificates have been used in many projects. Some projects have used a mix of monetary and non-monetary incentives, depending on the local policy (free medicine distribution vs. cost-recovery), cultural and socio-economic environment. In general, the value of monetary incentives paid to CMDs is up to ten times higher than that of in-kind incentives, as shown by the research done by WHO/TDR in eight areas covered by the community-directed intervention (CDI) programme.

Policies for External Monetary Incentives (EMI): Policies for External Monetary Incentives (EMI) for community workers vary from country to country and as a function of the Ministry involved (table 1).

Table I : Policies for External Monetary Incentives (EMI) for community workers applied by different Ministries in four African countries

	Ministry of Health	Ministry of Acriculture	Ministry of Water	Ministry of Environment
Nigeria	II	II	X	II
	No policy (0/2)	Policy to give (1/3)	n.a.	Policy to give (1/2)
Cameroon	II	II	II	II
	Policy to give(4/5)	Policy to give (3/7)	Policy to give (1/2)	No Policy (0/3)
Ethiopia	II	II	II	II
	No policy (0/4)	No policy (0/3)	Policy to Not give (1/1)	No policy (0/2)
Uganda	II	II	II	II
	No policy (0/2)	No policy (0/6)	No policy (0/1)	No policy (0/1)

Conclusion

The delivery of health care at the community level is a crucial component of Primary Health Care, for which there is recently a strong, renewed interest. Community Medicine Distributors play a key role in any community-based initiative for disease control. However, a high attrition rate of CMDs – often resulting from lack of motivation and incentives – can be a major obstacle to the sustainability and effectiveness in any intervention. Providing CMDs with incentives to motivate them to continue their precious work over a prolonged period of time is thus a key factor for the success of the intervention. However, approaches to ensure their sustained action cannot be standardized. Operational research is a key in developing innovative, cost-effective approaches to remunerate CMDs for their work, adapted to the local context.

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