# Some operational issues of Mass Drug Administration in urban areas: need to develop urban specific strategy

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The recommended strategy for elimination of Lymphatic filariasis (LF) is single-dose, once-yearly mass treatment with anti-filarial drugs and the program is in operation on a national level in India. Envirornmental control being a long term measure, the most practical and feasible method of controlling LF is to rapidly reduce the microfilaria load in the community by annual mass drug administration (MDA) of a single dose of antifilarial drugs, i.e. of diethylcarbamazine (DEC) or ivermectin with or without albendazole; 5–10 rounds of treatment with 75%–80% compliance could possibly eliminate the disease by reducing transmission to very low levels. 1,2,3,4,5,6

Rate of coverage and consumption is the most crucial factor in the success of Mass Drug Administration (MDA) program.<sup>7</sup> In spite of massive efforts, the program demonstrated suboptimal coverage and consumption in urban areas than rural. In Orissa, urban areas recorded significantly lower levels of coverage and compliance due to a lack of separate urban MDA strategy.<sup>4</sup> 2002 MDA data from urban and rural areas in Orissa, India, showed 45% coverage in urban areas and 76% in rural areas Lack of awareness is one of the major reasons for poor compliance of drug during MDA.<sup>3</sup>

MDA does not affect the condition of patients with filarial elephantiasis and hydrocele. So the community may not perceive any benefit immediately.

Poor awareness even after so many rounds of MDA is a challenge before programme planner and implementer. As there are plans to undertake further rounds of MDA in Orissa, some neglected aspects should get adequate attention (like development of Urban specific IEC strategy) in order to have better impact of the programme.

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## SOME SUGGESTED STRATEGY FOR URBAN AREA BEFORE MDA

#### **Urban specific IEC**

Intensive IEC should be done in urban areas sufficient time ahead of date of drug distribution, whatever may be the channel of communication timing of IEC activities should be planned as per the nature, composition and dynamics of urban population (which is different form those of rural population i.e. the educational level, occupation, and work pattern of the urbanities are different)

Use of fixed point mike instead of running mike will be suitable if mike is the channel of IEC. Message of IEC should give emphasis to the point that non intake of DEC by a person has much harmful effects (as it makes persons of that locality prone for infection by increasing the level of transmission), instead of giving the message that DEC is beneficial for them. Many people think that MDA is for persons suffering from lymphatic filariasis, the message should tell that the drug is for prevention and elimination, not for treatment of filariasis.

Use of mass media (T.V., radio, newspaper) and involvement of celebrities, community leaders and religious leaders in IEC activities may give better impact. Another point should be given importance during IEC is giving a message that development of SE during MDA is not a bad indicator, mostly those who have disease in clinical and sub-clinical stage develop SE, so it is a good indicator as it makes concealed cases to manifest.

It is reported in several studies that though adults consume the medicine, they don't give medicine to their children because of fear of side effects. 1,2,7 Most of the people get infected with microfilaria in childhood and develop symptoms later on. So the most vulnerable age group should get adequate attention. So our IEC message should give emphasis to the point that MDA is beneficial to the children and future generation.

#### **OPERATIONAL ISSUES**

In rural areas, the PHC network is involved in the programme, but no such mechanism exists in urban areas. Available personnel of health care delivery system in urban area are not sufficient enough to cover the dense population of urban, they also don't have clear idea about the geography of area which they are supposed to cover during MDA. Most of the distributors in urban area are stranger to the family members. To overcome this difficulty, two members team can be formed, one member from health sector another local volunteers from same locality can be involved for drug distribution. Even high school and college students can be utilized for drug distribution to overcome the shortage of manpower in urban areas. The distributors should be trained regarding the rationale behind MDA so that they can answer to the frequently asked questions of public and motivate them for drug consumption. Involvement of school and college children can also be done by conducting rally, role play etc. Students can be the source of information for the community. Distributor should visit their area of drug distribution prior to MDA to have better idea regarding house distribution in that area. This prior visit can also be utilized to distribute chirkut or conduct FGD. Chirkut distribution along with verbal explanation by door to door visit may help in low compliance area. (by improving the knowledge regarding cause, mode of transmission and role of MDA is disease elimination.)

There is also need for development of strategy to cover locked houses especially in urban areas where both the members of a nuclear family work outside and houses are locked during office hours. Strategy should also be developed to cover all offices and hostels in the allotted area to increase coverage. The format supplied to distributors should collect data regarding locked houses and should reflect information about degree of acceptance of tablet and cause of non acceptance. MOP up rounds should be conducted for coverage of absentees and locked houses. Drug for absentee can be left with family members and those for locked houses can be handled cover to house owner or neighbour or AWW/ANM, whether drugs have reached them or not can be confirmed during Mop up rounds.

Marking of houses should be done for easy identification of the house during mop up round -

L for locked house

R for resistant house

A for houses where some members are absent

C for houses where all members are already covered.

List of L, R and A houses with serial no and land mark should be reflected in a format which can be used later on during Mop up operation. Directly observed drug intake or supervised intake of DEC in front of distributor seems to be a better strategy (receiver is asked to have any edible thing available at her home if they are in empty stomach, then asked to consume drug in front of distributor) .

Sensitization of media personal needs to be done to discourage publication of baseless articles of adverse effect. This will check spread of rumour. In order to take care of adverse effects free supply of medicine should be made available in nearby government health centre. Involvement of local practitioner in management of cases with adverse effects can also be planned. The programme should have supervisors for monitoring of field activities ,similar to Intensified Pulse Polio Programme.

The programme to eliminate LF (PELF) has two principal goals: (i) to interrupt transmission of infection, and (ii) to alleviate and prevent both the suffering and disability caused by the disease. But the second part is usually neglected. <sup>1</sup>

Arrangement of camps for demonstration of home based care of filariasis cases will help in reduction of morbidity and this camp can be used to disseminate IEC regarding MDA by conducting FGD /group meeting.

In order to know the impact of MDA and to identify the bottlenecks in operationalization of MDA support should be given to conduct studies on issues like i) prevalence of LF in Pre and Post MDA period ii) knowledge, attitude and perceptions of people regarding LF and MDA in pre and post MDA period iii) Assessment of knowledge of drug distributor before and after training iv) feedback from drug distributor regarding problem faced during MDA v) study to assess the coverage, compliance of MDA and reason of non compliance.

Separate strategy for urban area should be planned to achieve positive behavioral change leading to better compliance of MDA.

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