

Brief communication

The Retirement of Malaria Control Workers as a Critical Problem for Vector Control in Oromia, Ethiopia

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Abstract

A retrospective record review for the period of seven years was done on retirement and death in February 2001 to assess the current status of malaria control workers in Oromia Regional State. The number of malaria control workers who left Malaria Control Programme due to retirement and death has dramatically increased across the last seven years with an average of about 15 workers annually. Among 106 malaria workers who left the programme during the period, 60% of them were retired and 26% deceased. It was also found that 89% of them were malaria technicians with specialized technical expertise in vector control, while the remaining 11% were highly experienced microscopists. Training of health professionals on malaria control through incorporating the malaria curriculum into the health training schools and institutions seems mandatory. [*Ethio.J.Health Dev.* 2003;17(1):79-83]

Introduction

Malaria has always remained among the dominant public health problems occurring in Ethiopia. The burden of the disease is very grave, contributing as well to the poor socio-economic development. The Malaria Eradication Service (MES) in Ethiopia was launched in 1959 with a vertical organization in line with the global campaign to eradicate malaria in the 1950s and 1960s (1). It had relatively well-trained and experienced workers with a well-developed training program, including a training center. However, the MES was later converted to a Malaria Control Programme (MCP) in 1971 with the aim of providing services related to case management, transmission control and management of epidemics.

Since June 1993, the National MCP operating in a country as a vertical program has been fully integrated into the general health services, and the Malaria Control Departments at the Regional Health Bureaus took over the responsibilities of preventing and controlling malaria in their respective regions. As a result, the well-trained and experienced malaria workers at the headquarter were transferred to regions and some into the general health services. Thus, the MCP in Oromia Regional State emerged in 1993 and has started the activities of malaria prevention and control.

Although vector control has been an important component of malaria control, most of the currently working experienced malaria control workers on vector control were trained in the 1960s in the then MES training center in Nazareth which stopped training in 1970s (2). Since then, very few training activities have been carried out and the current number of malaria control staff has dramatically decreased without replacement due to retirement and death. With this in mind, the

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objective of this review was to assess the status of malaria control workers in Oromia Regional State. This information would alarm the health planners or top decision makers to seek appropriate strategies to strengthen malaria control activities particularly its vector control component.

Methods

A retrospective record review was done on retirement and deaths of malaria control workers in Oromia in February 2001. The duration of the review was for the period of seven years from January 1994 to December 2000. The subjects of the study were all of the technical malaria control workers in the Region who were retired or deceased during the period.

A record review form consisting of variables such as personnel data, date of leave, and reasons for leave like retirement, death and transfer was prepared at Oromia Health Bureau and distributed to all Zonal Health Department Offices. After taking orientation, the zonal personnel filled it by reviewing and carefully examining all the personal files of each malaria worker who left the programme during the stated period. Finally, data were analyzed using EPI INFO Version 6.02 statistical package.

Results

At the time of review there were a total of 251(224 vector control technicians and 27 malaria laboratory technicians) malaria control technicians in Oromia, among whom 36 were trained vector biology and control technicians, 10 diploma or BSc nurses and environmental health workers who joined MCP from January 1994 to December 2000. A total of 106 malaria control technical staff left MCP from

January 1994 to December 2000. Among them, 43.1% were in east Shewa, 11.8% in east Wellega, 9.8% in Arsi and 9.8% in east Hararge zones.

The mean age of the workers, excluding the retired staff who usually retire on a pension at the age of 55, during their resignation was 40 years ranging from 24 to 51. The mean duration of work experience in years for 69(65%) workers who left the programme was 30 ranging from two to 38 years though it was unavailable for 35% workers. Fifty-nine (56 %) were 12th grade complete and above, and most of them had taken paramount training particularly on vector biology, vector control and malaria epidemiology. Among these, two workers held BSc and MD both with MPH degrees. Although the remaining 44% did not complete 12th grade, they had rich experience and skill in malaria control.

As indicated in Table 1, the number of malaria control workers who left the programme due to retirement and death has tremendously increased across the last seven years with an average of about 15 workers each year. Among all, 63 (60%) and 28 (26%) were due to retirement and deaths, respectively. Fourteen per cent of them were transferred to other programmes or left the job due to other problems such as termination or deportation to Eritrea in 1999. It was also found that 89% of them were malaria technicians who had rich and specialized technical expertise in vector biology, vector control and malaria epidemic management, while the remaining were highly experienced microscopists (malaria control laboratory technicians) on malaria diagnosis (Table 2).

Table 1: **Number of malaria control technical staff annually retired or deceased, 2001**

Reason	Year (G.C)							Total (%)
	1994	1995	1996	1997	1998	1999	2000	
Retired	3	7	9	7	11	11	15	63(60)
Deceased	1	0	4	5	3	7	8	28(26)
Other	0	2	0	3	0	9	1	15(14)
Total	4	9	13	15	14	27	24	106(100)

Table 2: **Number of malaria control workers retired and deceased by job title, 2001**

Title	Reason			Total (%)
	Retired	Deceased	Other	
Malaria technicians ^a	58	24	12	94(89)
Microscopists	5	4	3	12(11)
Total	63	28	15	106(100)

a: Malaria control technicians with rich experience on vector biology, vector control and epidemic management

Discussion

The results showed that the number of malaria control workers who left the programme either due to retirement or deaths has dramatically increased in Oromia during the periods of 1994 to 2000. This finding shows a very alarming situation in which the Regional Health Bureau has overlooked the critical problem of malaria control that requires emergency intervention especially for epidemic prevention and control. Currently, the problem has resulted in an acute shortage of trained personnel capable of analyzing and managing environmental, epidemiological and entomological activities of malaria control in the Region. Malaria rapid assessment conducted in 1999 in all of the Regions in the country indicated a severe shortage of experienced and skilled manpower due to retirement and deaths (3).

MCP in Ethiopia was decentralized and integrated into the general health services in 1993 and the activities of malaria control became the responsibility of the Regional Health Bureaus based on the health policy that is inline with decentralization and federalism in the country (4, 5). Malaria control workers and resources at headquarter in the Ministry of Health were dispersed among the Regions and

a hasty integration was done without clear guidance and program of implementation (2). The programme has been physically integrated into the general health services, in terms of administration and finances, but with no clear idea or explicit arrangements and responsibilities for the various categories of malaria control employees as well as for the health workers in the different levels of the general health services. In addition, there were no orientations and workshops to create mutual understanding between health managers and malaria control workers.

It was since July 1993 that malaria prevention and control activities in Oromia have been contemplated by the newly established Malaria Control Department at the Regional Health Bureau through maintaining the previous malaria control structures in the Region until getting time to reorganize and implement effective functional structure. During the first 2-3 years of integration efforts, the control activities were maintained stagnant and there was no significant achievement except the activities related to the establishment and development of organizational structure. At zonal level, MCPs in the Region were totally integrated into the Zonal Health Department Offices and

organized as a team since 1996. The sector offices have been still maintained serving 3-5 districts with their accountability being to the District Health Office in which they are based in administrative issues and to malaria control team at zonal levels in technical aspects. This dual accountability of the sector offices is also not uniform among the zones. Therefore, the process of integration has been continued since 1993 and effective integration has not been yet achieved.

Since 1997, in-service training with a particular emphasis on case management has been given in Oromia for health assistants, nurses and physicians. However, little attention has been given to vector control over the past decade with the results that the capacity to properly implement vector control measures has drastically diminished. As a result, one of the most critical problems currently facing the Region is an acute shortage of trained manpower particularly on the aspects of vector biology and control. In addition, the staffing patterns of most general health services are inadequate to undertake the effective control of the recent upsurge of malaria, particularly those activities related to transmission control and management of epidemics (6). It is known that the existing health professionals are not adequately trained in malaria control activities due to lack of malaria curriculum in the health training institutions, as it has been considered that malaria control has been the domain of MCP.

Most of malaria workers with adequate knowledge and skill in malaria control in general and vector control in particular have retired or deceased without being replaced by newly trained personnel and more will retire in the next few years. The exclusion of the existing malaria control employees from the health professionals' career structure in 1997 and 2001, compounded with problems related to lack of career structure for promotion and upgrading, has created demotivation among

them and significantly affected their morale. As a result, most of the relatively younger malaria control workers are currently transferring to other units particularly the administrative services in the health system. In addition, both the MCPs at Regional and Federal levels are not adequately staffed with team of vector control expertise.

There is a strong need to strengthen vector control and entomological staff with broader epidemiological expertise and skills to intensify and revitalize actions against malaria with the aim of reducing deaths from malaria by half by 2010 through the Roll Back Malaria Initiative (6). In the Health Sector Development Programme of Ethiopia that covers the period from 1998 to 2002, malaria has been given priority among communicable diseases and emphasizes on the training of health manpower (7).

In conclusion, the availability of trained and experienced staff on various aspects of malaria control at different levels of the health care delivery system seems mandatory. Limited in-service training on vector control for 1-2 weeks has been given for health assistants, public health nurses and environmental health workers by the Regional Health Bureau. However, such type of training is inadequate to enable them to carry out the full range of vector control activities in the Region. To mitigate the problems of trained manpower, an organized pre-service and in-service training on malaria control is the only alternative that seems feasible. Through incorporating malaria curriculum into the health training schools and institutions, it is expected that all graduates will be able to control malaria.

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