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Community-directed health (CDH) workers enhance the performance and sustainability of CDH programmes: experience from ivermectin distribution in Uganda

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The performance and `drop-out' rates of ivermectin (Mectizan®) distributors in the Ugandan programme for community-directed treatment with ivermectin (CDTI) were investigated and related to the manner in which the distributors were recruited. Distributors, from

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involving 40±60 community members aged ≥ 15 years.

Data Analysis

The data were analysed using Epi Info 2000 (Centers for Disease Control and Prevention, Atlanta, GA). The values relating to the performance, retention and function of each of three categories of ivermectin distributorÐ those selected by community members (CDHW), those selected by the leaders of the local council or other village leaders (CBHW-LC), and self-appointed volunteers (CBHW-SA)Ð were compared using χ^2 tests (Kuzma, 1992).

RESULTS

Of the 464 distributors who completed ®rst-round interviews, all of whom distributed ivermectin during 1998 but not during 1999, 322 (69%), 101 (22%) and 41 (9%) were CDHW, CBHW-LC and CBHW-SA, respectively (Table 1). (Five subjects failed to answer all the questions posed to them and the data collected from these individuals were excluded from further analysis.)

CDHW

Most (87%) of the CDHW interviewed in the ®rst round considered that their communities had been kept well informed about the distribution exercise and most (59%) indicated that their community members had kept to the times allotted for the distribution in 1998. Many of the CDHW had been involved in a programme activity (but not drug distribution) in 1999: 62% in urging family members to go for treatment, 70% in mobilising community members, 75% in educating community

TABLE 1
Continued

Question	A: No. and (%) of CDHW answering: Yes	A: No	B: No. and (%) of CBHW-LC answering: Yes	B: No	C: No. and (%) of CBHW-SA answering: Yes	C: No	P-value for comparison: A v. B	B v. C	A v. C
DURING 1999, WHEN YOU WERE NOT DISTRIBUTING:									
10 Did you urge your family members to take ivermectin?	186 (62)	114 (38)	52 (57)	39 (43)	21 (54)	18 (46)	NS	NS	NS
11 Did you help to mobilise community	205 (70)	86 (30)	50 (55)	41 (45)	20 (51)	19 (49)	<0.001	NS	<0.02

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TABLE 2

Responses from 224 community-directed health workers (CDHW), 57 community-based health workers selected by local councils (CBHW-LC) and 28 community-based health workers who were self-appointed(CBHW-SA), all of whom distributed ivermectin in 1998 and 1999

	A		B		C				
	No. and (%) of CDHW answering:		No. and (%) of CBHW-LC answering:		No. and (%) of CBHW-SA answering:		P-value for comparison:		
Question	Yes	No	Yes	No	Yes	No	A v. B	B v. C	A v. C
1 Did the community appreciate your services as a distributors?	207 (97)	7 (3)	2 (4)	54 (96)	24 (89)	3 (11)	<0.001	<0.001	NS
2 Will you continue distributing ivermectin next year?	190 (87)	29 (13)	4 (7)	53 (93)	22 (85)	4 (15)	<0.001	<0.001	NS

NS, Not signi®cant ($P > 0.05$).

mectin distributors generally were not supported by community members, although the same proportion (68%) claimed that they, as individuals, received good support. Most (73%) of the CBHW-SA indicated that their communities had been kept well informed about the distribution exercise, although few claimed that community members kept to the times agreed upon for the distribution of ivermectin. During 1999, 31% of the CBHW-SA who were not distributing ivermectin helped to provide health education to community members, 51% helped to mobilise community members and 39% advocated the programme; 93% of these distributors stated that they would agree to distribute ivermectin during the following year (2000). Among the distributors who did not distribute ivermectin in 1999, the percentage of CBHW-SA involved in other CDTI activities in 1999 was signi®cantly lower than the percentage of the CDHW. Of those still distributing ivermectin in 1999 (Table 2), most thought that their communities appreciated their services and said that they would be willing to continue working in the following year.

Comparing CDHW with CBHW-LC (Tables 1 and 2)

In general, whereas the CDHW agreed that they were supported by the community members and that their services were appreciated, the CBHW-LC did not feel so supported or appreciated ($P < 0.001$ for each). During a year in which they did not distribute ivermectin, the CDHW were generally promoting the CDTI in another way (through health education, mobilising their community and/or advocating the programme) and most indicated that they would be prepared to offer their services again in the following year (2000). In contrast, most of the CBHW-LC who had not distributed ivermectin in 1999 did not provide health education or advocate any CDTI activity in that year.

Later, in the PEM, it appeared that the reasons why some of the CDHW did not distribute ivermectin during 1999 were mostly associated with unavoidable family dif®culties, such as sickness, or being away on business or other community-related activities. On the other hand, the reasons given by the CBHW-LC who failed to deliver ivermectin in 1999 were lack of support from community members, the work being too much, and the lack of monetary incentives.

Comparing CDHW with CBHW-SA (Tables 1 and 2)

The CBHW-SA generally felt that they were not supported by community members, whereas the CDHW felt that community members did give them support. During 1999, a CBHW-SA who had not delivered ivermectin in that year was much less likely to have helped with health education, community mobilisation or with advocating the CDTI programme than a CDHW who had not distributed the drug in 1999. It was apparent that the CDHW were more likely to be reliable servants of the community members than were the CBHW-SA.

Comparing CBHW-LC with CBHW-SA (Tables 1 and 2)

The results indicate that CBHW-SA generally did a better job, in advocating the CDTI programme, than the CBHW-LC. Most CBHW-SA agreed that, as individuals, they were supported and appreciated by their communities, and they therefore wanted to continue providing services to the community members. In contrast, most of the CBHW-LC claimed that they had not received community support and therefore did not want to continue distributing ivermectin. Not surprisingly, many distributors in all three categories (CDHW, CBHW-LC and CBHW-SA) said they would like to receive monetary incentives and free mid-day meals (Table 1).

Other Issues Noted in the PEM (Table 3)

It was observed that a high coverage was achieved within a week in each of those communities where the community members had selected members of their kinship group/zone to distribute ivermectin. However, those CDHW who crossed into other kinship zones during distribution always had problems that

CDHW hesitated to ask for cash incentives because most of their community members were their relations or neighbours, even though these distributors had the freedom and support from their kinsmen to approach outsiders for monetary incentives. Even if the CDHW are not `encouraged' with cash incentives, community pressure is generally sufficient to push them to perform the desired service. The existence of such a cultural imperative was reinforced in the PEM discussions, where it was found that, although monetary incentives were considered important to all categories of distributors, it was only the CBHW-LC who felt that they could not continue offering their services to

and sustainability at the community level. Communities should be encouraged to select as many health workers as practicable, since their services are vital for the integration of many