

# Assessment of knowledge and factors that may predict willingness to volunteerism: A pilot study of community-directed distributors in Anambra state

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## Abstract

**Background:** Malaria as a leading cause of death in many developing countries requires urgent interventions. In order to improve access to healthcare, trained volunteers are used to distribute health commodities. The present study aims at determining knowledge and factors that may predict willingness to volunteerism in a developing country.

**Methodology:** This was a cross-sectional descriptive study carried out in 2014 among 284 community-directed distributors in three rural communities in Anambra, Southeast Nigeria using pretested semi-structured questionnaires.

**Results:** The age range of volunteers was 21–79 years. Most (71.8%) are females and are married (83.1). Only 5.6% of the volunteers did not have any formal education. The predominant occupation is trading (52.5). Most volunteers (78.5%) could define the term volunteerism. Less than half (40.1%) knew the resources that could be volunteered. Most (67.3%) felt that volunteerism is most needed in church activities. Many respondents (58.8%) had volunteered for one or more programs previously. The most common challenge faced was interference with other income generating activities (66.5%). Retired males were more likely to volunteer than retired females ( $P \leq 0.01$ ). However, females are more likely to volunteer if the main reason of volunteering is to help people ( $P \leq 0.01$ ). The more educated ones believe that volunteerism will help them to be selected for other community programs.

**Conclusion:** Most respondents had volunteered for other programs and the motivating factors included the satisfaction derived from helping others and the hope of being used for other community programs.

**Key words:** Community-directed distributors, knowledge, malaria, volunteerism

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## Introduction

According to the Centers for Disease Control and Prevention, malaria is one of the most severe public health problems worldwide. It is the leading cause of death and disease in many developing countries where young children and pregnant women are the groups most affected.<sup>[1]</sup> The challenges of meeting global health care needs in communities throughout the developing world are becoming increasingly complex.<sup>[2]</sup> Ensuring that available health interventions reach the people who most need them

is one of the greatest problems presently facing the health care system. Although global initiatives have improved the delivery of selected health interventions, many priority interventions such as those directed against malaria have unacceptably low coverage.

Building community capacity through the use of trained volunteers is fundamental to both prevention and treatment of malaria especially in resource poor settings

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like sub-Saharan Africa. The community-directed intervention (CDI) strategy is an approach in which communities themselves direct the planning and implementation of intervention delivery. Adopted by the African Program for Onchocerciasis Control in the mid-1990s, the CDI strategy has helped to ensure and sustain the delivery of annual ivermectin treatment to millions of Africans through the use of community-based volunteers.<sup>[3]</sup> The success of the CDI strategy in onchocerciasis control sparked widespread interest in applying the strategy and using the established community networks for other interventions. The effect of CDI delivery was especially dramatic for malaria interventions: Coverage with insecticide-treated nets (ITNs) and the percentage of febrile children appropriately treated for malaria more than doubled.<sup>[3]</sup>

Volunteers represent a growing, but often undervalued section of service delivery in many areas in the community, particularly in health care.<sup>[4]</sup> It has been reported that community-based health programs making use of volunteers can substantially increase effective access to malaria prevention and also increase access to formal health care in general.<sup>[5]</sup> Volunteerism is the principle of donating time and energy for the benefit of other people in the community as a social responsibility rather than for any financial reward.<sup>[6]</sup> It is thus a theory or doctrine that regards the will as the fundamental principle of the individual or the universe. Volunteering to help other people in need has enormous benefits for the community, the environment and even for the individual volunteer. It has been reported that volunteers have less stress and enjoy increased longevity.<sup>[7]</sup>

In an attempt to ensure that all communities, through their full participation, have access to simple but scientifically sound malaria preventive and treatment services, the National Malaria Control Program supported by Jhpiego and World Bank launched the Malaria Booster Program.<sup>[8]</sup> The program which is presently being piloted in seven States of Nigeria including Anambra state is using the CDI approach. Here, community-based volunteers called Community Oriented Resource Persons or community-directed distributors (CDDs) who are selected by their own communities are trained to provide safe malaria prevention and treatment services to members of their respective communities. Going by the successes recorded by similar programs in the past,<sup>[9,10]</sup> the issue that comes to the fore is ability to retain the volunteers in the program. Understanding what motivates volunteers is important for organizations that seek to harness and develop long-term volunteers in order to meet the need for global health care services. The present study sets out to assess the knowledge and factors that may predict willingness to volunteerism among CDDs in Anambra state. Findings will inform policy direction that should enable long-term sustainability of the program.

## Methodology

This was a descriptive cross-sectional study conducted in February, 2014 among 284 CDDs in three rural communities (Ozubulu, Ihiala and Osumenyi) in Anambra central senatorial zone in Southeastern Nigeria with a population of about 158,885 people. Anambra state is mainly inhabited by Igbo speaking people who are mostly Christians. Most members of the population are farmers, artisans and civil servants. The CDDs were selected by their various communities on volunteer basis. Ethical permit for the study was obtained from Ethics Committee of the University of Nigeria Teaching Hospital Enugu while informed consent was obtained from the respondents. The study instrument was a semi-structured self-administered questionnaire which was pretested among CDDs working in another program in the neighboring state. The questionnaire covers the demographic characteristics, knowledge, opinions and experiences on types of services/activities where volunteerism is required and attitudes and reasons for volunteerism.

All the 300 CDDs who were undergoing a training program on community management of malaria as a pilot study organized by the federal government of Nigeria were recruited for the study. However, only 284 who gave informed consent participated. Data were entered and analyzed using SPSS Inc. Released 2007. SPSS for Windows, Version 16.0. Chicago, SPSS Inc. Frequencies and percentages were presented as tables. Pearson Chi-square was used to compare discrete variables while likelihood-ratio Chi-square was used where the expected values in one or more cells is  $<5$ . The odds ratio (OR) for each variable was obtained by a computer-generated process where the responses for each question was "Yes" or "No." Hence the reference group for each OR were those whose response to each statement was "No." Level of significance was  $P < 0.05$  and the confidence interval was 95%.

## Limitations

The study was subject to some limitations including:

1. The study subjects are already volunteers and as such their responses may be different from those of the general population
2. The subjects were undergoing training which could have affected their responses.

## Results

The age range of volunteers was 21–79 years with a modal age range of 31–40 years. Most (71.8%) are females and are married (83.1). Only 5.6% of the volunteers did not have any formal education. The predominant occupation is trading (52.5%) [Table 1]. Most of the volunteers (78.5%) could define the term volunteerism. About 48.6% of the

volunteers said that any person could be a volunteer while others felt that only employed or unemployed persons could serve as volunteers. Less than half (40.1%) of the respondents knew that anything (time, money and/or services) could be volunteered. Some others felt it was only money or services or time that could be volunteered. Most of the volunteers (67.3%) felt that volunteerism is most needed in church activities, while only very few (1.8%) felt that sponsoring education of a child could be volunteered work [Table 2].

Many of the respondents (58.8%) had volunteered for one or more programs previously: Females 127 (62.3%) and 40 (50%) males had done volunteer work previously. The commonest volunteer works were immunization (28.9%) and ivermectin distribution (23.2%) while common challenges faced were interference with other income generating activities (66.5%), disruption of routine family life (49.1%) and lack of adequate incentives for the volunteers (38.3%). Retired males were more likely to volunteer than retired females ( $P < 0.01$ ). However, females are more likely to volunteer if the main reason of volunteering is to help people ( $P \leq 0.01$ ). There were no

Variables	Frequency (n=284)	Percentage
<b>Sex</b>		
Female	204	71.8
Male	80	28.2
<b>Age group (years)</b>		
21-30	34	12.0
31-40	108	38.0
41-50	75	26.4
51-60	44	15.5
61-70	16	5.6
71 and above	7	2.5
<b>Marital status</b>		
Married	236	83.1
Single	13	4.6
Widowed	35	12.3
<b>Religion</b>		
Christianity	268	94.4
African traditional religion	14	4.9
Others	2	0.7
<b>Educational status</b>		
No formal	16	5.6
Primary	64	22.5
Secondary	166	58.5
Tertiary	38	13.4
<b>Occupation</b>		
Teacher	10	3.5
Retired civil servant	20	7.0
Trader	149	52.5
Farmer	60	21.1
Unemployed	28	9.9
Others	17	6.0

other significant gender differences in the attitude of the volunteers and the reasons for volunteering [Table 3].

Among married persons 134 (56.8%); single persons 8 (61.5%) and widows 25 (71.4%) had been involved in previous volunteer work. Marital status did not affect attitude of the volunteers and reasons for volunteering [Table 4]. Forty-two (out of 80) people with no formal or primary education and 125 (out of 204) people with secondary or postsecondary education had volunteered previously. Retired people with secondary or post-secondary education are more likely to volunteer for programs when they retire than the less educated ones [Table 5]. Similarly, the more educated ones believe that volunteerism will help them to be

**Table 2: Knowledge, opinion and experiences of volunteers on types of services/activities where volunteerism is required**

Knowledge, opinion and experiences of volunteers	Frequency (n=284)	Percentage
<b>Knowledge of volunteers on volunteerism</b>		
Correct definition of volunteerism	223	78.5
Correct identification of a volunteer	138	48.6
Correct identification of what to volunteer	114	40.1
<b>Opinion of volunteers on types of services/activities where volunteerism is required</b>		
Church activities e.g., construction, sanitation, administration	191	67.3
Community development activities e.g., building schools, road construction and repair	22	7.7
Community health activities e.g., immunization, Vitamin A supplementation	108	38.0
Sponsoring education of children	5	1.8
Helping the vulnerable people e.g., children, widows, elderly and physically challenged	53	18.7
Community security watch	48	16.9
Educating the public on health and health related events	27	9.5
Number of respondents who had volunteered to a previous program	167	58.8
<b>Previous program participated in*</b>		
Ivermectin distribution	66	23.2
Immunization	82	28.9
Vitamin A distribution	54	19.0
ITN distribution	45	15.8
Others	5	1.8
<b>Challenges faced by volunteers in their previous volunteer work* (n=167)</b>		
Interference with other income generating activities	111	66.5
Disruption of routine family life	82	49.1
Lack of adequate incentives for the volunteers	64	38.3
Lack of respect for the volunteers	78	46.7
Working beyond the prescribed time	73	43.7
Others	1	0.6

\*Some had been involved in more than one program and some had more than one challenges. ITN=Insecticide treated nets

**Table 3: Attitude and reasons for volunteerism by various sexes**

Attitude and reasons for volunteerism	Male n=80 (%)	Female n=204 (%)	Total n=284 (%)	P value of the sexes	Odds ratio
Volunteerism should be encouraged	72 (90.0)	182 (89.2)	254 (89.4)	0.85	1.09
Reasons for being a volunteer include					
I am retired and it gives me joy to be able to serve my people	13 (16.3)	7 (3.4)	20 (7.0)	<0.01*	5.46
I am hopeful that doing this work will link me up to gainful employment	28 (35.0)	83 (40.7)	111 (39.1)	0.38	0.79
I believe that doing this work will give me some incentives like payment for attending workshops	16 (20.0)	38 (18.6)	54 (19.0)	0.79	1.09
I believe that doing this work will help me to be selected for other community programs	38 (47.5)	98 (48.0)	136 (47.9)	0.94	0.98
I enjoy helping people	42 (52.5)	137 (67.2)	179 (70.5)	0.02*	0.54
Among present volunteers who had volunteered in a previous program					
Reasons to encourage volunteerism	n=40	n=127	n=167		
I enjoy helping people	12 (30.0)	86 (67.7)	98 (58.7)	<0.01*	0.20
It helps me to learn new things	15 (37.5)	58 (45.7)	73 (43.7)	0.36	0.71
It helps me to meet many people	10 (25.0)	31 (24.4)	41 (24.6)	0.94	1.03
It endears me to my people	7 (17.5)	14 (11.0)	21 (12.6)	0.28	1.71
Others	2 (5.0)	3 (2.4)	5 (3.0)	0.39	2.18
Reasons to discourage volunteerism					
It takes too much of my time	4 (10.0)	7 (5.5)	11 (6.6)	0.32	1.90
It disturbs normal routine	4 (10.0)	5 (3.9)	9 (5.4)	0.14	2.71
It is very stressful	0 (0.0)	3 (2.4)	3 (1.8)	-	-
Others	0 (0.0)	7 (5.5)	7 (4.2)	-	-

\*Significant

**Table 4: Attitude and reasons for volunteerism by various marital groups**

Attitude and reasons for volunteerism	Married n=236 (%)	Single n=13 (%)	Widowed n=35 (%)	P value of the marital groups
Volunteerism should be encouraged	210 (89.0)	13 (100.0)	31 (88.6)	0.23
Reasons for being a volunteer include				
I am retired and it gives me joy to be able to serve my people	89 (37.7)	5 (38.5)	17 (48.6)	0.47
I am hopeful that doing this work will link me up to gainful employment	45 (19.1)	2 (15.4)	7 (20.0)	0.94
I believe that doing this work will give me some incentives like payment for attending workshops	115 (48.7)	4 (30.8)	17 (48.6)	0.45
I believe that doing this work will help me to be selected for other community programs	147 (62.3)	10 (76.9)	22 (71.0)	0.55
I enjoy helping people				
Among present volunteers who had volunteered in a previous program				
Reasons to encourage volunteerism	n=136	n=8	n=25	
I enjoy helping people	77 (56.6)	7 (87.5)	14 (56.0)	0.18
It helps me to meet many people	35 (25.7)	2 (25.0)	4 (16.0)	0.58
It endears me to my people	18 (13.2)	1 (12.5)	2 (8.0)	0.75
It helps me to learn new things	61 (44.9)	5 (62.5)	7 (28.0)	0.15
Others	4 (2.9)	0 (0.0)	1 (4.0)	0.84
Reasons to discourage volunteerism				
It takes too much of my time	10 (7.4)	0 (0.0)	1 (4.0)	-
It disturbs normal routine	6 (4.4)	0 (0.0)	3 (12.0)	-
It is very stressful	3 (2.2)	0 (0.0)	0 (0.0)	-
Others	7 (5.1)	0 (0.0)	0 (0.0)	-

selected for other community programs. However, significantly more proportions of the less educated volunteers aim at helping people. Incidentally it is more likely that the less educated will discourage the volunteerism because of the feeling that it disturbs their normal family life [Table 5].

The unemployed are most likely to volunteer with the hope that volunteerism will link them up with gainful employment ( $P \leq 0.01$ ) while the employed are more likely to volunteer just for the joy of helping people ( $P = 0.01$ ) [Table 6].

**Table 5: Attitude and reasons for volunteerism by various educational groups**

Attitude and reasons for volunteerism	No formal or primary education n=80 (%)	Secondary and postsecondary education n=204 (%)	Total n=284 (%)	P value of educational groups	Odds ratio
Volunteerism should be encouraged	71 (88.8)	183 (89.7)	254 (89.4)	0.81	0.91
Reasons for being a volunteer include					
I am retired and it gives me joy to be able to serve my people	1 (1.3)	19 (9.3)	20 (7.0)	0.02*	0.12
I am hopeful that doing this work will link me up to gainful employment	33 (41.3)	78 (38.2)	111 (39.1)	0.64	1.13
I believe that doing this work will give me some incentives like payment for attending workshops	19 (23.8)	35 (17.2)	54 (19.0)	0.20	1.50
I believe that doing this work will help me to be selected for other community programs	28 (35.0)	108 (52.9)	136 (47.9)	0.01*	0.48
I enjoy helping people	68 (85.0)	111 (60.7)	179 (70.5)	<0.01*	4.75
Among present volunteers who had volunteered in a previous program					
Reasons to encourage volunteerism	n=42	n=125	n=167		
I enjoy helping people	36 (85.7)	62 (49.6)	98 (58.7)	<0.01*	6.10
It helps me to meet many people	10 (23.8)	31 (24.8)	41 (24.6)	0.90	0.95
It endears me to my people	3 (7.1)	18 (14.4)	21 (12.6)	0.22	0.46
It helps me to learn new things	21 (50.0)	52 (41.6)	73 (43.7)	0.34	1.40
Others	1 (2.4)	4 (3.2)	5 (3.0)	0.40	0.41
Reasons to discourage volunteerism					
It takes too much of my time	4 (9.5)	7 (5.6)	11 (6.6)	0.38	1.77
It disturbs normal routine	5 (11.9)	4 (3.2)	9 (5.4)	0.03*	4.09
It is very stressful	0 (0.0)	3 (2.4)	3 (1.8)	-	-
Others	0 (0.0)	7 (5.6)	7 (4.2)	-	-

\*Significant

**Table 6: Attitude and reasons for volunteerism by various employment statuses**

Attitude and reasons for volunteerism	Employed n=236 (%)	Unemployed n=28 (%)	Retired n=20 (%)	P value of employment status
Volunteerism should be encouraged	206 (87.3)	28 (100.0)	20 (100.0)	0.03*
Reasons for being a volunteer include				
I am retired and it gives me joy to be able to serve my people	NA	NA	20 (100.0)	-
I am hopeful that doing this work will link me up to gainful employment	80 (33.9)	28 (100.0)	3 (15.0)	<0.01*
I believe that doing this work will give me some incentives like payment for attending workshops	47 (19.9)	4 (14.3)	3 (15.0)	0.69
I believe that doing this work will help me to be selected for other community programs	119 (50.4)	10 (35.7)	7 (35.0)	0.17
I enjoy helping people	158 (66.9)	6 (21.4)	15 (75.0)	<0.01*
Among present volunteers who had volunteered in a previous program				
Reasons to encourage volunteerism	n=136	n=18	n=13	
I enjoy helping people	87 (64.0)	2 (11.1)	9 (69.2)	<0.01*
It helps me to meet many people	33 (24.3)	5 (27.8)	3 (23.1)	0.94
It endears me to my people	15 (11.0)	2 (11.1)	4 (30.8)	0.19
It helps me to learn new things	63 (46.3)	9 (50.0)	1 (7.7)	0.02*
Others	5 (3.7)	0 (0.0)	0 (0.0)	-
Reasons to discourage volunteerism				
It takes too much of my time	11 (100.0)	0 (0.0)	0 (0.0)	-
It disturbs normal routine	9 (100.0)	0 (0.0)	0 (0.0)	-
It is very stressful	3 (100.0)	0 (0.0)	0 (0.0)	-
Others	7 (100.0)	0 (0.0)	0 (0.0)	-

\*Significant

## Discussion

Volunteerism is a way of giving back to the society. People, irrespective of their age or educational status, generally like to support the community resources that they use or that benefit people they care about. The age of the volunteers in the present study ranged from 21 to over 70 years. This shows that volunteerism knows no age barriers and people of all ages except, of course, for the very young can volunteer one service or the other. A similar age range of 12–76 years had been documented among volunteers in an earlier study.<sup>[11]</sup> Unlike the previous study where 61% of the volunteers were men,<sup>[11]</sup> our study like others<sup>[12,13]</sup> revealed that the majority of volunteers were females. This could be because women are seen in these communities as humane, kind, readily available and accessible to all members of the community. In addition, men being the breadwinners for most families are usually busy with income-generating activities and may not have time for volunteer services.

Knowledge of respondents on organizations or groups where volunteerism may be required was high particularly regarding church activities and community health services. In contrast, scholarships for children's education and provision of public health education were scarcely mentioned as ways of volunteering. This by implication indicates activities that are commonly provided by volunteers in these communities and those requiring urgent volunteer services. Volunteerism is often needed in various aspects of human endeavor including education, health, community development, environmental management, services for the children, youths, elderly, the disabled, disaster victims as well as for animals and pets.<sup>[14]</sup> As has been previously reported, volunteerism is a long-term behavior, most people who volunteer continue to do so for an extended period.<sup>[15]</sup> In the present study, 58.8% of the respondents had worked previously as a volunteer in different programs, including immunization, ivermectin, Vitamin A and/or insecticide treated nets (ITNs) distribution. This could be, as a result, of the confidence the community has on them having tried and tested them in other programs and found them to be trustworthy. It could also be from their interest and willingness to help other people.

Expectedly, the major challenges encountered by our volunteers were interference with other income generating activities and disruption of routine family life. These are comparable to other reports where work commitments, lack of free time, family obligations and burnout were the major barriers to volunteerism.<sup>[16,17]</sup> This indicates the need for modification of volunteer programs in order to avoid unnecessary interference with family obligations and other work commitments particularly economic activities. In contrast to the previous finding that within the retirement population, men are less likely to volunteer than women,<sup>[18]</sup> our study revealed that retired men are

more likely to volunteer than retired women. This could be, as a result, of higher confidence among the retired men in their ability to provide services. The retired women, on the other hand, might be occupied by domestic work at home and as a result, may neither have the time nor energy for volunteer services.

Understanding the reasons for volunteering is critical to volunteers' retention. Some people would offer voluntary services without expecting any form of payment mainly in religious activities or to help people in need. However, in the present study, though 58.8% of respondents have existing experience with volunteering, only 38% had a positive attitude towards volunteerism. This may be because some volunteer with the hope of getting incentives like gainful employment and financial benefit. These serve as motivators to volunteer without which they may have a negative attitude toward further volunteer works. Many motivators have been recorded in the past such as a feeling of being appreciated,<sup>[16]</sup> nonmaterial incentives like community recognition, feeling of making a contribution and pride in the services provided.<sup>[3]</sup> Other motivating factors include psychological and emotional rewards, career-related benefits, opportunities for interpersonal interaction and the opportunity to serve disadvantaged communities.<sup>[2]</sup>

Similar to previous findings,<sup>[19]</sup> retired people with secondary or higher education are significantly more likely to volunteer than the less educated ones. This is probably as a result of the confidence they have in their ability to deliver services particularly among the professionals. For the other respondents, the more educated respondents are more likely to volunteer in order to be selected for other community programs, while the less educated are likely to volunteer for the joy of helping other people in need. The views of literature on the impact of educational status on volunteerism differ. While some reported an inverse relationship between the amount of education and the likelihood to volunteer especially in religious programs,<sup>[11]</sup> others noted a clear positive correlation between educational levels and the tendency to volunteer.<sup>[20]</sup>

## Conclusion and Recommendations

Most of the volunteers were familiar with the term volunteerism but only a few had in-depth knowledge of the term. More than half had volunteered for other programs and the motivating factors included the satisfaction derived from helping others and the hope of being used for other community programs. Major challenges identified were interference with income-generating activities and disruption of routine family life. Hence, it is recommended that project managers should modify programs in such a manner as to enable volunteers attend to their personal needs as well.

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