ORIGINAL ARTICLE

Rural posting experience, requests for transfer, and perspectives about critical factors for staff retention among primary health care workers in urban Kano, Nigeria

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Abstract

Background: Inadequate skilled manpower at rural posts is a serious impediment toward equitable and universal access to healthcare in Nigeria.

Objective: To examine the experiences of primary health care (PHC) workers on rural assignments, requests for transfer, and perspectives about critical factors for retention of healthcare workers at rural posts.

Materials and Methods: Using descriptive cross-sectional design, 262 PHC workers in Kano were studied. Data were collected using semi-structured questionnaires and analyzed on Statistical Package for Social Sciences version 22. Pearson's Chi-square and Fisher's exact tests were used to test for significant association between categorical variables. $P \leq 0.05$ was considered significant.

Results: The mean age of the workers was 36.0 ± 9 years. Majority were females (55.4%) and married (64.2%) with mean working experience of 13.0 ± 8.0 years. Only 29 (11.2%) had rural posting experience. Mean duration of posting was 4.0 ± 2.0 years; 19 (65.5%) sought re-deployment for lack of social amenities and good schools for children 19 (100.0%) and poor work environment 17 (89.5%). Common positive rural experiences mentioned were less work pressure 26 (89.7%), cordial relationship with colleagues and community members 24 (82.8%), and willingness of the community to partake in health activities 24 (82.8%). Common negative experiences reported include lack of social amenities 27 (93.1), lack of equipment and supplies in facilities 26 (89.7%), and stagnation 22 (75.9%). The workers' perspectives about critical factors for retention at rural posts include good facility infrastructure and functional equipment 240 (92.3%), good housing 237 (91.2%), potable water and electricity supply 238 (91.5%), good schools for staff's children 38 (91.5%), and good access of road to town 239 (91.9%).

Conclusion and Recommendation: While steering gear at upgrading basic infrastructures in rural areas, government should in the interim, ensure attractive working and living conditions at rural posts.

Key words: Nigeria, primary health care, request for transfer, rural posting, staff retention

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Introduction

Availability of skilled manpower at service locations is key to the operations of an effective primary health care system. Like in many other developing countries, human resource challenges in Nigeria are impeding progress toward equitable and universal access to care for all, especially in ensuring availability of skilled health manpower in the rural areas.[1] Shortage of health manpower is common globally, but is more severe in rural and remote areas.[2] Skilled health care workers are often reluctant to accept posting to rural facilities, and those that get posted somehow workout their ways back to urban facilities soon before they settle, leaving the rural posts vacant or manned by less qualified or in-appropriate cadre of personnel.[3] Although data on human resource for health in Nigeria are scarce and not very reliable, records suggest that there are 13 doctors, 92 nurses/midwives, and 62 community health workers in the public sector/100, 000 population.[3] However, access to doctors is about three times more and up to six times more nurses in urban areas compared to the rural settlements. Furthermore, attrition rates in rural areas are three times more for doctors and two times more for nurses than in the urban areas.[3,4]

The rural setting in Nigeria is characterized by serious under development, agricultural activities, lack of basic amenities, and suffering. The rural population constitutes about two-thirds of the population of the country, are on the average poorer, less well educated, and more in need of health care than the urban population.[5] Paradoxically, majority of the health care personnel in the country are concentrated in the urban areas.[3,6] Thus, health care workers in rural and remote locations face high levels of work demand under poor work environment, infrastructure, and unfavorable social amenities. These negatively impact on their motivation and cause them to seek redeployment or search for more satisfying jobs in urban areas where living conditions, work infrastructure, and opportunities are more diverse and favorable. Studies have shown that low pay, poor working and living conditions, poor career structure, lack of opportunities for professional development, inadequate facility, and supplies influence retention of health workers at duty posts.[7-10] According to the Herzberg two-factor theory,[11] "motivators" or "satisfiers" and "hygiene" factors influence motivation and job satisfaction of workers. While motivators such as achievement, recognition, advancement, and growth are factors which if satisfied will encourage staff to work harder, the absence of "hygiene factors" including organizational policy and administration, on the other hand, is associated with job dissatisfaction and decreased motivation of workers. Thus, optimum motivation and satisfaction of workers and retention at rural facilities require a balance between these two groups of factors. This study, therefore, examined the experiences of urban primary health care (PHC) workers with rural posting and their perspectives about critical factors for retention of healthcare workers at rural posts. Findings from this study would be useful to policy makers, human resource managers, and researchers in understanding and packaging formidable strategies for retention of healthcare workers at rural posts.

Materials and Methods

Description of study area

The study was carried out in urban Kano, comprising Kano Municipal, Dala, Gwale, Fagge, Nasarawa, Tarauni, Kumbotso, and Ungoggo Local Government Areas (LGAs). Kano State is located in North Western Nigeria and is one of the oldest and largest states in the country. According to the 2006 National Census, Kano had a population of 9,383,682 people and the metropolitan LGAs contributed 2,828,861 (30.1%) of this figure.[12] As at December 2014, there were 1066 PHC facilities in Kano and only 145 (13.6%) were located within the eight urban LGAs. There were 8352 PHC workers under the public sector of the state with 5,262 (63%) working in the urban LGAs.[13]

Study design

A descriptive cross-sectional design was used for the study.

Study population/inclusion criteria

This comprises PHC workers from urban PHC facilities in Kano metropolitan.

Sample size determination

A sample of 262 PHC workers were determined using an appropriate formula for estimating minimum sample size for descriptive studies ($n = z^2pq/d^2$),[14] based on a standard normal deviate (z) 1.96 at 95% confidence interval; margin of error (*d*) 0.05, and a 25% prevalence of urban health workers who had worked in rural areas obtained from previous similar study from Ogun State Nigeria.[15]

Sampling technique

A 4-stage sampling technique was used for selection of the study subjects. At the first stage, four LGAs (50%) were randomly selected from the eight metropolitan LGAs of Kano State by simple balloting. At the second stage, the PHC facilities in each of the selected LGAs were listed in order of performance based on clinic attendance, and the top most three performing facilities were recruited. This resulted in the selection of a total of 12 performing PHC facilities. At the third stage, the lists of all cadres of PHC workers in the selected facilities were used as the sampling frame, and probability proportionate to size based on the numbers of the health workers in the facilities was used to allocate the required numbers of the workers selected from each facility. Finally, the required numbers of samples were systematically selected using sampling intervals obtained by dividing the number of workers in each facility by the

required sample from that facility. This resulted in the selection of the 262 respondents.

Instrument description and method of data collection

A self-administered semi-structured questionnaire with mostly open-ended questions was used for data collection. The questionnaire has four sections that elicited information on the respondents' bio-data, their experiences of rural posting, and perspectives about factors critical for retention of workers at rural posts. The parameters used to assess the workers' experience of rural posting included duration of posting, as well as positive and negative experiences of the workers, while on posting.

Pretesting of the questionnaire was done on fifty health workers at Murtala Muhammad Specialist Hospital in Kano City. The questionnaires were administered by six trained Hausa-speaking research assistants, and the interviews were conducted in the local language (Hausa).

Data management and analysis

Data were analyzed using IBM SPSS Statistics for Windows, version 22. Armonk, NY: IBM Corp. Quantitative variables were summarized using appropriate measures of location and variability, whereas categorical variables were presented as frequencies and percentages. Pearson's Chi-square and Fisher's exact tests were used to test for significant association between categorical variables. $P \leq 0.05$ was considered significant.

Ethical considerations

Informed consent was obtained from prospective respondents before questionnaire administration. The consent form was in the local language (Hausa), and literate respondents indicated acceptance by signing the consent form whereas the nonliterate ones affixed their thumbprints. Permission and ethical clearance for the study were obtained from the Kano State Primary Health Care Management Board and the Institutional Review Board of Aminu Kano Teaching Hospital, respectively. Data were collected in February/March, 2015.

Results

Sociodemographic profile of the workers

The workers' ages ranged from 18 to 59 years, with a mean and standard deviation of 36.0 ± 9 years. Majority were females (55.4%), married (64.2%), and Hausa/Fulani (96.9%). They had 0–14 children, with a mean of 3.2 ± 2.0. The majority (78.5%) had not more than 4 children. About half of the workers (48.5%) were community health workers. Their working experience ranged from 9 months to 28 years with a mean of 13.0 ± 8.0 years. Almost half (41.5%) had not more than 10-year working experience [Table 1].

Experience of rural posting and requests for transfer among health workers

Only 29 (11.2%) of the workers examined had worked in a rural facility. The majority (88.8%) had no experience with rural posting. Those who experienced the posting stayed between 10 months and 8 years. The mean number of years spent on posting was 4.0 ± 2.0 years. The majority (18 workers) spent 4–6 years on the posting.

The majority of the workers who went on rural posting gave multiple responses when asked about their experiences with the posting. Most common positive experience in order of occurrence were less work pressure 26 (89.7%), cordial relationship with fellow health workers and community members 24 (82.8%), and willingness of the community members to partake in health activities 24 (82.8%). On the other hand, the most common negative experiences of the

Table 1: Sociodemographic characteristics of the respondents

Characteristic	Frequency (n=260)	Percentage
Professional designation		
Doctor	16	6.1
Community health worker	126	48.5
Nurse/midwife	43	16.5
Pharmacist/pharmacy technicians	40	15.4
Laboratory scientists/technicians	35	13.5
Years of service		
0-10	108	41.5
11-20	95	36.5
21-30	57	21.9
Age group (years)		
18-24	29	11.2
25-31	53	20.4
32-38	79	30.4
39-45	47	18.0
46-52	39	15.0
53-59	13	5.0
Sex		
Male	116	44.6
Female	144	55.4
Ethnicity		
Hausa	178	68.5
Fulani	74	28.5
Yoruba	4	1.5
Igbo	4	1.5
Marital status		
Single	80	30.8
Married	167	64.2
Widowed	3	1.2
Divorced	10	3.8
Number of respondents' children		
0-4	204	78.5
5-9	50	19.5
10-14	6	2.3

Table 2: Experiences of the staff on rural posting (*n*=29)

Experience parameters	Frequency	Percentage
Duration of rural posting (years)		
<4	9	31.0
4-6	18	62.1
>6	2	6.9
Positive experience while on posting		
Less work pressure*	26	89.7
Cordial relationship with co-workers and community members*	24	82.8
Willingness of community members to participate in health activities*	24	82.8
Cheap life style	17	58.6
Occasional gifts and appreciation from community members	9	31.0
Negative experience while on posting		
Lack of basic amenities in rural areas*	27	93.1
Lack of basic equipment and supplies at health facility*	26	89.7
Stagnation/no career progression*	22	75.9
Too many expectations from the community members	11	37.9

*Multiple responses

Table 3: Respondents' reasons for requests for transfer to urban facilities

Reason	Frequency	Percentage
Lack of social amenities and school for children*	19	100.0
Poor work environment*	17	89.5
Long distance from home and family*	15	78.9
Lack of recognition and reward system for extra effort and sacrifice*	11	57.9
Professional stagnation	9	47.4
Difficult rural life style	7	36.8

*Multiple responses

workers while on posting included lack of basic amenities in rural areas 27 (93.1), lack of basic equipment and supplies in health facilities 26 (89.7%), and stagnation/lack of career progression 22 (75.9%). The other experiences of the workers are as summarized in Table 2.

About two-thirds of the health workers had an experience in rural posting, 19 (65.5%) sought for redeployment to urban facilities. Request for redeployment/transfer was neither associated with worker's sex ($\chi^2 = 0.42$, $P = 0.52$), ethnicity (Fisher's exact $P = 0.35$), marital status (Fisher's exact $P = 0.27$), number of respondent's children (Fisher's exact $P = 0.42$) nor with the professional designation (Fisher's exact $P = 0.43$) or the worker's duration on rural posting (Fisher's exact $P = 0.64$).

The most common reasons given by the workers for seeking redeployment included lack of social amenities and good schools for children 19 (100.0%), poor work environment 17 (89.5%), and long distance from home and family 15 (78.9%). Other reasons are as depicted in Table 3.

Table 4: Health workers' perspectives about factors considered critical for retention of workers in rural facilities

Factors	Frequency (*n*=260)	Percentage
Health worker related		
Potable water and electricity supply at home	238	91.5
Availability of good schools for children of staff	238	91.5
Provision of good housing for staff	237	91.2
Opportunity for professional development	232	89.2
Payment of rural posting allowance	232	89.2
Facility related		
Good health facility infrastructure with adequate and functional equipment and supplies	240	92.3
Good patronage of facility by community members	236	90.8
Community related		
Good access road to town/city	239	91.9
Community appreciation of services rendered at facility	226	86.9
Reasonable distance from town/city	219	84.2

Health workers' perspectives about factors critical for retention of health workers at rural posts

All the health workers examined were asked to list factors that they considered necessary for retention of health workers in the rural posts. Their responses were structured and categorized into factors related to the health worker, to the facility; and those related to the community as summarized in Table 4. The most mentioned factor was good facility infrastructure with adequate and functional equipment and supplies mentioned by 240 (92.3%) respondents. Among the health worker-related factors, there were marked concern for social amenities including good housing for staff 237 (91.2%), potable water and electricity supply at home 238 (91.5%), and availability of good schools for staff's children 238 (91.5%). Good access road to town/city was the highest listed factor among the community factors 239 (91.9%). Other factors considered critical for retention of health workers are as shown in Table 4.

Discussion

Of the work force studied, only a few had experienced rural posting even though it has been well established that majority of the Nigerian population and health care needs are in the rural areas.[3,5,6] With ever increasing burden of diseases such as HIV/AIDS, emerging and re-emerging diseases,[1] epidemic scares such as Ebola and poor health indices, Nigeria would need urgent actions to be re-directed

at human resources management if equitable health care distribution is to be achieved as the rural posting experience remains uncommon among her health work force. Further distressing was the fact that two-thirds of the few who had experienced rural posting sought re-deployment back to the urban settings. Interestingly, the reasons for the health workers' reluctance to accept rural redeployment, dissatisfaction with the rural health post, or quick return to the urban settings have not changed significantly over the years and comprised the "motivators" or "satisfiers" and "hygiene" factors as postulated by Herzberg many decades ago.[11] Studies done within the country[4] and in other countries[16-18] noted similar factors to affect health workers' retention at rural health posts.

The key to achieving equitable health distribution in Nigeria still lies in addressing these fundamental issues that ensure that the work force remains enchanted with the rural setting for as long as the rural posting lasts. Unless these intrinsic and extrinsic job factors are addressed, it may be difficult to retain or attract health workers to the rural posts. Nigerian health care managers would need to strategize on which option(s) best suits different rural settings.

Compulsory postings, training of indigenous health workers, inclusion of primary health care in training curriculum, monetary and nonmonetary incentives such as career development, training, provision of better housing, loans and greater reward of work performances are examples of interventions that have been suggested or explored in different settings.[7,9,18] At the present stage, the Nigerian health care system lacks effective strategies that address the motivation of health care workers in rural and remote areas and an exploratory look into what has worked or failed in other countries may be insightful. The 'one size fits all' approach to recruitment or retention of health care workers has been faulted with severe limitation as health care workers have unique characteristics and needs as well as peculiarities of the rural setting.[18] The fact that workers mentioned motivators and dissatisfiers as: Lack of basic/social amenities, lack of good schools for children, poor work environment, long distance from home and family and hard rural life corroborates the fact noted by previous research that this work force crisis is beyond the health sector alone.[19] Tackling the crisis would involve looking beyond the health sector alone and ensuring global responsibility, political will, financial commitment and public-private partnership for country-led and country-specific interventions.[19]

In our study, it is worthy of note that issues that promote community participation in PHC were mentioned by the health care workers as positive experiences while on rural posting: Cordial relationship with fellow health workers and community members with willingness of the community members to partake in health activities. For the delivery of equitable health services via the PHC platform, these factors should be encouraged and promoted in our rural settings.

Although these findings would inform health care managers on strategizing to retain health workers in rural posts, it was limited as it did not study the health workers' background which has been noted to be associated with attractiveness of the rural posts.[20]

In summary, this study observed that health workers are reluctant to accept posting or remain at rural posts because of poor living and working conditions in these areas in spite of the fact that the inhabitants are the most in need of their services. In view of this, therefore, while steering gear at upgrading basic infrastructure in the rural areas, in the interim, local and state governments should work together with development partners to ensure and maintain attractive working and living conditions in rural posts. As incentive, priority for advancement and professional development should be on employees from rural and remote posts.

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Conflicts of interest

There are no conflicts of interest.

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