What do Health Workers say About Rural Practice?

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Abstract

Adequately staffed rural health services improve healthcare delivery and health outcomes, yet this is lacking in rural Ghana. We used a descriptive qualitative design to understand the contextual issues that affect rural practice, in the Upper East Region, Ghana. Sixty-eight in-depth interviews were conducted with healthcare workers and analysed thematically. Four themes were identified: types of postings to rural settings, healthcare workers' perceptions of their rural postings, perceived enablers and motivators for rural practice, and perceived challenges and barriers to rural practice. While adequate supervision and family proximity are needed to improve the feelings of loneliness, isolation and neglect in rural areas, challenges and barriers such as inadequate security, unstable electricity supply, language barrier, lack of equipment and transport/ambulance have been identified to have negative influence on healthcare workers. The findings highlight the need for healthcare managers to improve fairness and transparency in the posting and reshuffling processes of healthcare workers.

Keywords

Nurses, rural healthcare, qualitative research, healthcare workers, motivation, challenges, barriers, Ghana

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Introduction

In many countries worldwide, the shortage of healthcare workers has hindered the attainment of development related goals including the delivery of quality healthcare with greater impact in rural areas (Kwansah et al., 2012; Lehmann et al., 2008; Nkomazana et al., 2015). Developed countries such as Canada and Australia, with largely scattered rural populations, face challenges in the provision of adequately staffed rural health services, due to healthcare workers shortage in these areas (Standing Council on Health, 2016; Tang & Browne, 2008). This has contributed to poor health outcomes from the rural populace, ranging from increased levels of chronic diseases, poor mental health, to living shorter lives (Cosgrave et al., 2019; Paradies, 2006; Tang & Browne, 2008).

The unequal distribution of health personnel between rural and urban areas is a challenge in almost all countries but more significant in low and middle-income countries. These countries are faced with an urgent need to increase their health workforce, maintain a balance distribution of these healthcare workers especially to rural areas where health needs are highest as well as to promote work proficiency, productivity and satisfaction (Baum et al., 2017; Buchan et al., 2013). For instance, the Dakar region in Senegal which is predominantly urban with only 23% of the country's population has more than half (60%) of the countries physicians (Zurn et al., 2010).

Most healthcare workers in Ghana are posted directly to their various places of work after completing their health training school, except doctors, physician assistants and nurses who engage in 1 year rotation (internship), with the

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possibility of undertaking professional development courses to upgrade their skills. Nevertheless, Ghana like many sub-Saharan African countries has the distribution of health personnel skewed towards the urban areas despite the high level of mortality and morbidity reported from the rural areas (GDHS, 2014; Ghana Statistical Service (GSS) et al., 2018). The country faces large existing inequities in health service delivery and health status of the population, with urban areas recording skilled birth attendance rate of 91% compared to 59% in rural areas. Differences exist across the 16 regions in Ghana with those in the northern sector, experiencing the greater impact (Ghana Statistical Service GSS et al., 2018)).

Despite the high medical care needs in rural areas, including high mortality and morbidity rates, compared to the urban areas ((Dussault & Franceschini, 2006; Moore et al., 2016)), it is still a challenge for health managers to attract and retain adequate healthcare workers in rural areas (Cosgrave et al., 2019; Dieleman & Harnmeijer, 2006). This has been attributed to various 'push' and 'pull' factors (Keane et al., 2012; Lehmann et al., 2008). According to these scholars, the 'pull' factors have the tendencies to attract an individual to a new destination, such as enhanced employment opportunities, higher salary and improved living conditions. On the other hand, the 'push' factors deter the individual from dwelling in a locality, and these factors might include lack of employment opportunities, low salaries and poor living environments within that locality.

Additionally, healthcare workers have generally encountered various challenges and barriers to practice effectively in rural areas defined in the scope of processes, policies or perceptions that have negative influence on the provision of adequate healthcare (Campbell & Graham, 2006; Miller et al., 2016).

Although the Ministry of Health, Ghana, recognizes the factors identified by various scholars as possible influencers to rural practice, some of the existing issues are country-specific and could vary from one region to another even within a specific country. Therefore, in order to understand the contextual issues that affect rural practice in Ghana, we conducted a qualitative study with healthcare workers in the Upper East region.

Methods

Study Setting

Upper East Region was purposively selected for this qualitative study as it is largely rural and considered to be one of the most deprived and vulnerable regions in terms of levels of poverty in Ghana (Apanga & Awoonor-Williams, 2018; Ofori-Boateng & Bab, 2015). The total population is estimated to be slightly above 1.3 million (GSS, 2020).

The study was carried out in 10 out of the 13 districts in the region. These included Pusiga, Binduri, Builsa South, Bawku East, Bolgatanga, Bawku West, Kassena Nankana East, Builsa North, Kassena Nankana West and Garu Tempane.

These districts were purposively selected to include health facilities situated in typically rural, peri-rural and urban to improve the study area diversity. The roads leading to the communities in these districts are not in good state and as such difficult to access during the rainy seasons.

The major health provider in the region is the national government through the Ghana Health Service (GHS, 2015), with many Community-based Health Planning and Services (CHPS) compounds (Agorinya et al., 2018). The region shares boundaries with the Republic of Burkina Faso to the North and the Republic of Togo to the East. Since these bordering countries have similar demographic characteristics such as language, socio-cultural and belief systems, there is normally heavy movement of persons, goods and services across the various borders, which further present challenges regarding disease control at the entry point.

Study Design

A qualitative descriptive approach was used to understand the contextual issues that affect rural practice. More specifically, healthcare workers were asked to share their views regarding their postings as well as motivators, challenges and barriers to rural practice. Qualitative approaches to research offers a deeper analysis and provides an in-depth understanding on how respondents explain their situations, and interpret their experiences (Denzin &Lincoln, 1994; Rosenthal, 2016), thereby allowing individuals to contribute to knowledge. The design is suitable in providing straightforward descriptions of the experiences and perceptions of the study participants on the phenomenon under study (Sandelowski, 2010).

The flexible nature of the method used in this study enabled the study participants to express their feelings and experiences using their own words (Hesse-Biber & Leavy, 2010). Since it is impossible for researchers to clear their memories of their previous knowledge (Flood, 2010), this study took into consideration the importance of the researcher's reflexivity.

The reflexivity concept recognizes that meanings are conveyed within a specific phenomenon, settings and context highlighting the importance of using the researchers' personal reflection, understanding and thinking as a primary evidence (Finlay & Gough, 2008). Therefore, in this study, the researchers maintained reflexivity through the reflexive field notes taken during each face-to-face interview and the development of fieldwork reflexive journal. The researchers read the information gathered after each interview to make corrections, impressions and interpretations. This led to the in-depth and richer meanings about personal, ethical and theoretical features of the research questions used (Carolan, 2003).

Conceptual Framework

The conceptual framework (figure 1), informed the questions on the interview guide, thereby guiding the data collection

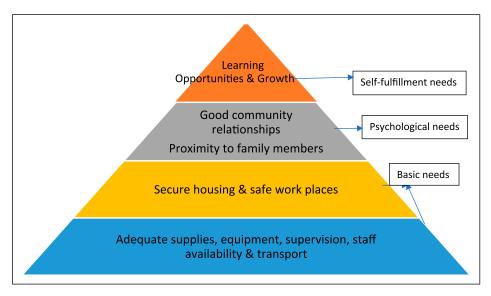


Figure 1. Factors influencing and retention of health workers in rural areas.

and analysis of the study. The framework incorporated Maslow (1949), hierarchy of needs. The fundamental proposition of this theory is the hierarchical nature of the needs of individuals, where meeting the basic needs is paramount to achieving the subsequent ones. The framework highlights the different types of needs (self-fulfilment, psychological and basic), that could influence healthcare workers decisions to work in a particular locality.

Data Collection

This qualitative study is based on in-depth interviews carried out with sixty eight (68) healthcare workers between August 2015 and January 2016. A semi-structured interview guide was used to explore healthcare workers' perceptions and experiences. Qualitative interviews usually begin with a broad question with probes used to deepen reflection on experiences. Interview questions focussed on healthcare workers' experiences of being posted to their current position, what enables and motivates them to stay, and barriers and challenges that they experienced. The interview guide was piloted outside the study area to ensure that the length and structure of the interview were suitable and all interviews were conducted in places respondents considered appropriate (Rosenthal, 2016). The interviews were conducted in English with the interviewer exploring systematically exploring the topics in the interview guide with participants until there was no new item emerging. For data assurance purposes, the interviews were tape-recorded, transcribed each day and complemented with the field notes.

Respondents selected had worked for at least a year in primary healthcare facilities. Factors such as age, sex, ethnicity, designation, marital status and number of years worked were taken into consideration in the selection of respondents for the study to obtain a deeper understanding on

the contextual issues that affect rural practice. The different cadres of healthcare workers who were selected for the study were physician assistants, midwives, general registered nurses, enrolled nurses, community health nurses, psychiatric nurses and health aide nurses. Respondents were assigned unique identification number for anonymity.

The recruitment process involved the researcher first obtaining a list of healthcare workers working in the health centres in the selected districts from the regional directorate. At the community level, the list of potential study participants was verified and they were contacted directly to avoid perceptions of obligation to participate in the research (Check et al., 2014). The researcher then provided the necessary information about the study including the study purpose, its voluntary and confidential nature and sought their interest to participate through verbal communication.

The participant information documents, which included letter of introduction, information sheet and consent form were given to potential participants to enable them make a decision whether to participate in the study. A follow-up visit was later made to meet those who had decided to participate in the study, where they confirmed their agreement by signing the informed consent form. Out of the seventy nine (79) information documents circulated, a total of sixty eight (68) potential participants (healthcare workers) confirmed their willingness to participate through calls and text messages. The researcher then booked appointments for the in-depth interviews with the healthcare workers at times and dates suitable to them, to avoid interrupting their work.

Ethical clearance for the study was obtained from the Flinders University Social and Behavioural Research Ethics Committee, South Australia (approval number, 6804) and the Navrongo Health Research Centre Institutional Review Board, Ghana Health Service, Ghana.

Written informed consent was obtained from the study participants before starting the interview including permission to publish anonymous quotations from healthcare workers. Data collection commenced once the study participants had signed the consent form. They were informed that their participation in the study was voluntary and they could withdraw at any time or decide not to answer any question (Russell & Purcell, 2009).

Data Analysis

Data analysis began with two of the authors, independently exploring the transcripts through multiple readings. This process enabled the researchers to familiarize themselves with the data, which led to the emergent of appropriate themes and insights (Braun & Clarke, 2006). The data was then analysed using Braun and Clarke (2006) proposed thematic framework analysis approach since it has been established to be one of the efficient, flexible and highly utilised methods for analysing qualitative data. This process of thematic analysis has been grouped into six phases, which includes familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing a report (Braun & Clarke, 2006).

By using this method of data analysis, the transcripts were explored through multiple readings and key and essential data identified, organized and coded. Similar themes were generated into possible themes that reflected the perceptions of respondents. These emerging themes were again refined and analysed further by moving back and forth 'the part and the whole' transcribed texts to identify structures of the main theme. To determine the final results, all themes were reviewed, analysed and related to the research question. Themes relating to the research question were then identified, analysed and reported.

The validity of the data was enhanced through triangulation of the narratives from different cadres of healthcare workers in the study settings. Data analysis included inductive approach, with categories and themes identified from the data (Moretti et al., 2011; Patton, 2002).

Methodological Rigour and Trustworthiness

Demonstrating rigour in qualitative research is important to enable research findings to have integrity to impact policy and practice (Hadi & Closs, 2016). In this study process, rigour and trustworthiness were assessed using credibility, transferability, dependability and confirmability criteria. The credibility was enhanced through the audio-tape recordings of the interviews which ensured that the exact words of the respondents were captured (Cutcliffe & McKenna, 1999). Also triangulation approach used in this study which included the combination of in-depth interviews and researcher's reflective field notes, improved the quality of the study data (Golafshani, 2003).

Regarding the transferability criterion, it is essential that detailed information on the study settings and the sampling method used are made available (Finlay, 2006) and these have been provided accordingly by the authors, though it is not the intension of the researchers to generalize this study findings. Further, the methods used in data collection, analysis and interpretation have been described in this study process (Krefting, 1991) to enable other researchers to replicate a similar study if they desire though this could be difficult due to changes in time and locations. The quality of the research measured through the confirmability criteria involved the use of auditing (Erlingsson & Brysiewicz, 2013). Apart from the field notes taken, the reasons for the selection of the research setting, recruitment of study informants and the details of the data collection and analysis confirm the auditability of the research process. The rigour and trustworthiness of this study were sustained throughout the study including ethical issues.

Results

The results represent the contextual issues that affect rural practice in Ghana. Out of the 68 interviews conducted, majority were females (55.9%), with nursing backgrounds (70.5%). These included general registered nurses, enrolled nurses, community health nurses, health aide nurses and psychiatric nurses. Most of the participants had a diploma qualification (51.5%), married (55.9%), from Akan ethnic group (29.4%) and had worked in the study area for 7–9 years (26.5%). The age ranged from 23 to 59 years (Table 1).

Based on the analysis of the participants' narratives, four themes were identified: (i) Types of postings to rural settings, (ii) Healthcare workers' perceptions of their rural postings, (iii) perceived enablers and motivators for rural practice and (iv) perceived challenges and barriers to rural practice.

Types of Postings to Rural Settings

Participants were appointed and posted to their respective health facilities through different means, including immediate posting after completing their health training courses and transfers, which resulted from inter/intra departmental shuffling across various health facilities. The types of postings included direct, random, reshuffling and personal request.

Direct posting. Most of the healthcare workers were posted straight to their respective healthcare facilities, after completing school. They had little or no choice over the initial postings they received and as such had a difficult decision to accept or reject the postings,

What made me to accept the posting to this place was that they are my superiors and there is nothing I can do. I either accept it or quit the job and you know that there are no jobs available in this country so if I don't accept the posting, I will be jobless. It was

Table 1. Demographic Characteristics of Health Workers Interviewed.

Region	Upper east region $(n = 68)$
Median age in years (range)	40 (23–59)
Sex	
Male	30 (44.1%)
Female	38 (55.9%)
Ethnicity	
Akan	20 (29.4%)
Grusi	15 (22.1%)
Dagaare	7 (10.3%)
Kusasi	16 (23.5%)
Dagomba	10 (14.7%)
Marital status	
Single	24 (35.3%)
Married	38 (55.9%)
Divorced	6 (8.8%)
Designation	
General registered nurse (RN)	12 (17.6%)
Enrolled Nurses (EN)	16 (23.5%)
Community health nurses (CN)	13 (19.1%)
Physician assistants (PA)	9 (13.2%)
Midwives (MW)	11 (16.2%)
Health aide nurses (HA)	5 (7.4%)
Psychiatric nurses (PN)	2 (2.9%)
Qualification	
Certificate	29 (42.6%)
Diploma	35 (51.5%)
Bachelor degree	4 (5.9)
Years worked in the study area	
I-3	16 (23.5%)
4–6	11 (16.2%)
7–9	18 (26.5%)
10–12	14 (20.6)
13–15	9 (13.2%)

when I finished my nursing course that the government posted me here to work. (EN2)

Random posting. Initially, a type of posting known as 'random posting' was instituted where respondents after completing school were allowed to choose their three preferred places, though in some instances, some were refused their preferred places. A general registered nurse, explained her situation,

I got here by random postings. Initially before you complete school, our superiors ask us to choose 3 regions we want to work so when I completed school, I was told to choose 3 regions. My first choice was northern region, which is my hometown, the second was upper west region and the last, Brong Ahafo region but unfortunately, I wasn't posted to any of these regions. I landed in upper east region and was posted to this community. (GN10).

Reshuffling process. After working in a particular health centre for some years, a process known as 'reshuffling' takes place, where healthcare workers are transferred to different health centres within the region. One of the midwives, described the process,

I received a letter from my regional director informing me that they are doing reshuffling of health personnel within the region so I could also be reshuffled. Not long after receiving that letter, I was sent here to work. In fact I had no choice than to come here and work so I came with the hope that I can get a better place later and leave this village because you know it's not easy working here. (MW4)

The 'reshuffling' process could also take place when some of the health centres are in critical need of certain cadres of healthcare workers at a particular point in time. In such instances, management members discuss with some of the workers the need to transfer them to other health facilities,

The district director told management that there was the need for me to be here since the medical assistant [physician assistant] was going on retirement. They needed someone to take over his duties so my name was mentioned. They discussed it with me and I saw it as a big challenge but I accepted because it is my responsibility to take care of patients. It's a challenge because it's my first time of managing a facility and my main challenge is how to manage the staff. (PA7)

The quote above reveals the Ghana Health Service policy on postings, which specifies that a health worker after completing of an approved course could be posted out based on the specialised training. A physician assistant who manages one of the health facilities, explained this further,

I was initially working in another district in this region and obtained sponsorship to do the physician assistant course so after my training as a physician assistant, I was just posted here to work. I did my internship at bongo and then the regional director brought me to this facility. I have worked in other rural communities. So because it was not my first time, I was ok. I just felt it was one of my responsibilities to accept posting to any place. (PA1)

Personal request. There were instances where respondents requested to work in various communities closer to their spouses or hometowns. One of the enrolled nurses whose request was granted in this regards explained accordingly,

As for me it was my choice to work in this community so I put in a request of transfer and luckily for me I was brought here. I moved from another district to this place because my husband works in the next community so we are able to visit each other frequently. That is the only thing keeping me in this village. (EN8)

The different types of postings identified among healthcare workers were direct postings, random postings, reshuffling and personal request. Healthcare workers had little or no control over their initial postings after completing school.

Healthcare Workers' Perceptions of their Rural Postings

Healthcare workers in the study area had different perceptions concerning their postings such as limited control on postings, sense of obligation and lack of transparency and trust.

Limited control on postings. Generally, healthcare workers do not have control over their postings and as such, described the process as being forced to work in rural areas amid other things as securing a job and making some money for their daily upkeeps. A community health nurse explained,

As for me I accepted to come here to work because if I refuse, I will remain unemployed so it's like you are forced to come and I have a family to take care of so if I don't come and work, there will be no money for me. If I get the chance I will move to the city because it's difficult working in a rural area like this. (CN8)

Sense of Obligation. Many of the healthcare workers regarded the rural postings as a responsibility towards fulfilling their duties of providing healthcare. It should be noted here that, usually, workers recognize these postings as a responsibility that supersedes their individual desires that motivate them to either accept or reject their duties,

As a Physician Assistant, I see it as my responsibility to take care of patients wherever my superiors post me to. So as they have posted me to this village, I have to carry out my duties well so for me it's all about fulfilling my duties as a health professional. (PA4)

Lack of transparency and trust. A majority of the participants perceived the posting process as unfair, without knowing the full details of the reshuffling process. As such, many have undergone reshuffling several times. The Ghana Health Service policy on posting specifies that healthcare workers in rural areas should not stay for more than three (3) years without been transferred to urban areas or given the opportunity to further their education but most of them had worked in these rural health facilities for more than the years specified by policy. Since these rural healthcare workers are paid the same salaries as their counterparts in the cities, the possibility for further studies after the 3 years of services serve as an incentive though difficult to access.

One of the enrolled nurses who have worked in the study area for almost 7 years, had this to say during the in-depth interview,

To tell you the truth the way our superiors go about the postings is not clear at all. I don't know the exact process they follow. They posted me to this village 5 years ago. I was thinking that by 2 or 3 years, they will transfer me to another facility in the town but I am still here whiles some of my colleagues who came to meet me here have already been reshuffled to Bolga health facility which is in the city. This is not fair at all and if I continue to think about this I will always be frustrated. (EN11)

Another respondent further explained how serving the required years in these rural communities is not a guarantee for transfer. Instead, they need people in authority to lobby on their behalf. A community health nurse, who had worked for 5 years, explained her situation,

It is not easy because even when you have finished serving your required years in the rural facility, before you can move out to the city, you have to know somebody up there in Accra [the capital], I mean a big man in regional office to help you. This shows the unfairness in the system. (CN2)

Although participants initially accepted their rural postings due to a sense of obligation related to training received, after the 3 year period many participants experienced the subsequent posting process as random, unfair and lacking transparency which impacted their trust in the administrators responsible for this process.

Perceived Enablers and Motivators for Rural Practice

A variety of factors that served as motivation to healthcare workers in these rural communities were identified as rural training, internship and orientation, log rural service, skill acquisition, community members support, family proximity and low cost of living.

Rural training, internship and orientation. Rural training, internship and orientations were identified as essential means of preparing healthcare workers for rural practice. Healthcare workers who had their training and/or had the opportunity to engage in internship programs in rural areas were encouraged to work in these areas.

I ever had the experience of working in a village like this place when I was doing my internship as a community health nurse so when I was posted here, psychologically I had already prepared myself so I took it cool. Ideally, I knew that where humans live my services are highly needed... (CN5).

The type of orientation given to healthcare workers during their training and before they resume work in rural communities was regarded important. According to respondents, since some of them have no rural experience, the orientation materials should include possible challenges in rural areas,

...they explained some of the challenges in working in villages and other things which also helped me a lot to prepare my mind because I have stayed in Accra [biggest city in Ghana] for a long time. (PA2)

Long rural service. Healthcare workers who had previous experiences of working in rural areas accepted transfer to other rural areas without hesitation. Accordingly, a 56 year old nurse, who had few years to go on retirement explained,

As a nurse who has been working in rural areas for a long time, I knew what to expect from working in places like this and I also know that I am not supposed to refuse posting to any place. For the young ones who don't know this when they are asked to go to the rural areas they are always grumbling. I don't have any problem working in the rural area. (GN9)

Skills acquisition. Many of the healthcare workers perceived working in rural areas as an opportunity to learn on the job and acquire additional skills to be multipurpose, partly due to the lack of specialised health personnel in the health centres located in these areas. Healthcare workers with lower qualifications sometimes handle clinical tasks above their expertise, further encouraging them to learn more to improve their skills. Some added that, rural practice has enabled them to make use of what equipment is available in the health facilities, making them creative on their jobs,

I came here because I realised that there would be an opportunity for me to even learn and upgrade myself. The reason is that as I am here, I do more of the consultations by managing some of the diseases and follow-up on the people. Since I came here, I realised that conditions that I thought without IVs and other expects opinion people cannot survive in the cities, am able to manage them without those necessary equipment... (GN7)

Respondents further explained that, the experiences they have obtained from working in these rural areas have put them in positions to be able to work in any health facility and contributed to building their confidence levels,

You know when you work in a community it helps you to fit in everywhere you go because in the community the people expect more from you. They believe that when you handle them well, it will help them to recover faster. Because they see you every day, they prefer you to treat them than referring. The people have built confidence in me. Some people start crying when they are referred to other facilities in the cities. (EN15)

Community members' support. Many of the healthcare workers mentioned how community members' cooperation and support have motivated them to stay longer in these rural communities. According to them, friendly environment and cooperation between healthcare workers and the community members are important to effective healthcare delivery. A 37

year old midwife, who has worked in the community for 6 years said,

I will say that one important thing in life is working in a friendly environment and this community is like that so even though we are in the village, we are happy taking care of the people and they are also happy and this is enough encouragement for me to do my best. (MW10)

Family proximity. Participants living with their relatives considered it as a source of motivation but sometimes a challenge. Majority of the females regarded this as a means of preventing marital disputes and separation. A 45 year old nurse, who had worked in the study area for 10 years explained,

I want to even get more closer to my family members, I mean staying with my husband in the same room so that I can perform my duties and he can also take proper care of me and the child. Where I am staying now is not too far away from him but still he can go for another woman since we don't stay in the same room and this can lead to divorce... (EN13).

However, the few, who regarded this as a challenge, argued that staying closer to relatives could disrupt their work due to financial demands from both nuclear and extended family members, which put undue stress on them. This was paramount among the males compared to females, probably because in the Ghanaian culture, men are usually regarded as the breadwinners. A physician assistant, who had worked in the study area for 8 years explained,

In fact I will be frank with you. One thing that is motivating me to stay in this rural area to practice is because I am far from home and family members cannot put too much demands on me. Assuming I was living closer to them, they will be asking for money and other things and when you are not able to provide, they will call you a bad person, which can be very disturbing. (PA5)

Low cost of living. Most of the respondents regarded working in rural areas as an opportunity to save more money since they spend less, especially, on food items and livestock compared to urban areas,

The cost of living in rural areas is low so if you stay in a rural area like this and at the end, you go back to the city or town and your colleagues are still better than you are financially, then I think it's a curse. You didn't enjoy any life and you are also poor then it's serious because food, meat and other things are cheap here (PN1).

Motivators identified included family proximity, contextspecific orientation and training, an opportunity for skill acquisition, local community members as important sources of knowledge and support, and the low cost of living in a rural community.

Perceived Challenges and Barriers to Rural Practice

Participants highlighted some of the major challenges and barriers they faced working in rural areas. These were in relation to communication, supervision, equipment, social amenities (electricity, water and transport), and security as well as maintaining relationships.

Language barrier. Most of the respondents mentioned language as a barrier to effective healthcare delivery. Due to the different languages spoken across various regions in Ghana, some of the healthcare workers are unable to speak the northern dialects, making it difficult for them to communicate effectively with clients. A 38 year old midwife said,

You know I am a Fante [southern] by tribe and these people also speak Frafra [northern language] so the communication is a problem. In fact is a big barrier I will say. When they talk, I can't understand and when I also talk they can't understand so that's really a problem. Tell me how I can take care of patients without understanding their language. I think our superiors will have to think about some of these things before posting workers. (MW8).

An ability to converse in northern dialects contributed to increasing the workload for healthcare workers who were fluent in these dialects because clients felt more comfortable dealing with them. However, the familiarity created through effective communication, has also led to some of the clients requesting for financial support from the healthcare workers',

It is not easy working here at all because we all speak the same language. The good side is that the community members feel comfortable dealing with me but the other thing is that they all want me to take care of them when they are sick which increases my workload. Sometimes some of the patients even ask me for money to buy drugs and food because they know am one of them. (GN5).

Some of the respondents explained that the increased workload is partly due to insufficient healthcare workers in the health facilities. Though healthcare workers sometimes engaged in additional tasks in order to keep the health facilities running, respondents reported this additional workload affected them psychologically and should be given immediate attention,

...Another challenge we are facing here is that we don't have enough staff to help with the work so we are doing more work...When the clients also report here for treatment, they are not aware of your living conditions so they come here expecting you to be able to meet all their needs. But you know if you define health and you delete the psychological aspect of it, it is incorrect so you can imagine a patient attending to another patient. We are

going through too many challenges that is affecting us in a psychological way so our superiors have to do something about it immediately. (PA3).

Inadequate supervision. According to respondents, lack of supervision from their superiors and their inability to access what is due them have generated into a feeling of isolation and neglect, subsequently leading to a state of depression and affecting concentration at work,

I will say, isolation is an issue and if you are prone to depression, you know what will happen to you. I mean living in this village feels like you are isolated from everybody and what is happening in the world so is a big challenge. Is not only that, you feel like you have been neglected by your superiors because even when you are fighting for what is yours, nobody will mind you. Sometimes you feel depressed such that you can't even concentrate on your work. (MW6)

Inadequate equipment. It appeared respondents did not expect much in terms of equipment availability in these rural healthcare facilities, nevertheless, they expressed concerns about their inability to carry out essential tasks due to lack of basic equipment. A nurse, aged 44, managing one of the health facility,

What I think should be improved is our equipment we work with because this health facility serves over 8000 people so I feel that, here we should at least have a lot of equipment to work with. Even as at now, we are relying on the Rapid Diagnostic Test (RDT kits) for malaria, which is also in shortage in the whole country. Our only microscope that will help us to test malaria is also not functioning so at times we are limited on what to do. Even glucometer strips for basics testing of glucose, which is very important and can save lives if you are able to detect whether the person is hyper or hypo are not available so sometimes, you feel pressed out...we know that these things are bound to happen in rural area but we still need improvement. (GN11)

For many of the respondents, the few available equipment are old and broken and should be replaced since it can impede work progress and endanger the lives of patients. Also because supervisors expect them to produce the desired work output, which put undue pressure on them,

Our equipment too is old and some broken and so we don't feel comfortable working with them. The delivery equipment rust as time goes on because of the bleach. Our sterilizer too is broken so we now boil the instruments, which is also a very hectic procedure. At least we need these things to work. (MW1)

Lack of electricity supply, water and transport. Apart from the frequent power (electricity) outages, that could affect the potency of certain drugs that required cold storage and the absence of an ambulance to transport patients, respondents

were also concerned about the distance covered to fetch water to their respective health facilities and the absence of ambulance for referral.

The means of transport is a big challenge and these days we also have problem with the lights. When the light goes off, it takes 2 or 3 days for us to get it again and if you are lucky, it will be half day. Some of the medicines are losing potency due to frequent lights out and will not produce any effect on patients. We also have to travel long distance to fetch water since we have only one borehole that is serving the facility and the whole community. The walking distance from here to the borehole is about 15 mins and sometimes you can queue for about 20 mins before you can get water to the facility. (HA2)

Difficulties developing or maintaining spousal relationships. Difficulty in finding suitable partners and maintaining relationships was frequently identified by female healthcare workers in the study area. The young unmarried ones who had recently received their initial postings complained of the limited choices they had in terms of identifying suitors,

You know one serious thing is how I can get a husband by staying in this community. Any time I talk about this, my friends laugh at me but it's true that if I continue to stay here, I cannot get any man to marry. I am talking about men of my class because in this village I can only find men who are opportunist to date for marriage. They would only come and spend my money with nothing to offer me. (CN12).

For those who were worried about sustaining their relationships, especially the married ones due to their busy schedules, one of the female nurses had this to say,

For the past 2 months, I have not been able to go home to visit my husband because there is always work to do even during weekends. So as a married woman I'm worried about how I can keep my marriage to prevent other women from intruding. (HA1).

The gender-related issues associated with family pressures, impacted women more than men in the study area, due to their family responsibilities and roles,

You know in our society, women are expected to take care of the home including the children and even the men so immediately you leave the house, everything comes to a standstill and if your marriage doesn't work, people blame you for that. So you see the pressure is just too much for us and sometimes it affects your career development". (GN6).

Lack of security/robbery attack. Participants were aware of regular attacks by armed robbers that resulted to some community members losing their lives. This created fear and panic among healthcare workers in the study areas,

The armed robbery cases are increasing here so we are not all that safe here. In the night around 2:00am, armed robber came to my room to attack me and took my laptop and phone. The same day, 2 people in the community were killed by robbers so we are at risk staying here and they also attacked some of our colleagues in the nearby community. (EN14).

In summary, perceived barriers and challenges included language barriers, insufficient staffing, inadequate supervision, difficulty accessing up-to-date information and difficulties developing and maintaining relationships. Inadequate living and working conditions were also identified by participants such as lack of working equipment and supplies, interruptions in electricity, inadequate access to water and trained staff, transportation to aid referrals, and unsafe housing.

Discussion

The study findings highlight healthcare workers perspectives on their postings process, which included unfairness and nontransparency. This could stem from the inability of health service managers to adhere to posting policy terms such as not granting transfers or opportunities for further studies to healthcare workers who have satisfied their requisite years' of service. Providing rural healthcare workers with opportunities for career advancement immediately after serving their required number of years could serve as a source of motivation since they receive the same salaries as their colleagues in the cities. This could also address the uncertainties regarding the 'reshuffling' process to posting negotiations, which have led to nurses and the other healthcare workers, seemingly losing trust in the posting processes. Nevertheless, due to the insufficient healthcare workers in rural Ghana (Bawontuo et al., 2021; Haruna et al., 2019), health mangers might be reluctant in granting workers transfer, since this could increase the problems caused by insufficient healthcare workers in these localities.

Our findings reveal the importance of understanding the role rural training, internship programs and orientation play in equipping and motivating healthcare workers who are assuming duties in rural areas for the first time. Others have established a link between rural training and the willingness of healthcare workers to practice in rural areas (Bingham et al., 2021; O'Sullivan et al., 2018; O'Sullivan & McGrail, 2020).

Though healthcare professionals who grew up or have previous work experiences in rural areas are more likely to accept postings to these places, this study have shown that women are not likely to work in rural areas especially if it could lead to family separation. While the movements of men are mainly connected to economic reasons (Farre, 2013), the movements of women are mostly linked to family considerations (Barhate et al., 2021; Choi et al., 2012; Lee et al., 2021). Previous studies have confirmed that female nurses

leave their full time jobs for part-time jobs due to family commitment but their male colleagues do so for higher remuneration (Fox et al., 2006; Mayorova et al., 2005).

Family proximity was identified as a motivational factor to minimize isolation in the study area. The possibility that an individual healthcare worker would accept to work in a rural or remote area in the presence of his/her family members is high. In the absence or limited family support, women usually make decisions that may limit their professional capabilities so as to balance their professional and individual lives, thus, choosing jobs specialty that could put them in a position to have family life (Lee et al., 2021; Perrone et al., 2009). On the contrary, the few healthcare workers who preferred staying away from family members did so to avoid pressure from other family members (both nuclear and extended).

Another source of motivation among the nurses, in this study, was the opportunity to acquire additional skills from their ability to work with the limited equipment available in the health facilities. Though this could improve creativity on their jobs, it could also compromise the quality of health care provided. Studies have identified the poorly resourced nature of the health facilities, in rural Ghana, as contributing to maternal deaths. This was mainly attributed to the difficulties nurses encountered in carrying out basic medical and laboratory test, due to the absence of the required equipment and logistics (Adatara et al., 2021; Dalinjong et al., 2018).

The findings of this study further highlight challenges such as inadequate supervision and difficulties in developing and maintaining spousal relationships. Adequate supervision is important for quality healthcare delivery by building the competence of nurses (Bellerose et al., 2021; Buchan et al., 2013; Sham et al., 2021) but this was generally lacking among many of the nurses in the study area, leading to a feeling of isolation and neglect. Minimal supervision from health authorities has led to healthcare workers concluding that their superiors/bosses do not regard their well-beings as a priority (Chapman et al., 2017). The feeling of being neglected causes healthcare workers in rural and deprived areas to lose hope of building their career and improving their lives, while also preventing healthcare workers in urban areas from willingly moving to rural areas to work (Kwansah et al., 2012; Okoroafor et al., 2021). Similarly, healthcare workers in the study attributed their acceptance to work in rural areas to fear of losing their jobs, lack of jobs and financial needs. Studies looking at why workers remained at post identified directives from management and fear of employees losing their jobs as key factors (Akintola & Chikoko, 2016; Cuervo et al., 2020).

The difficulties in developing and maintaining spousal relationships were identified largely among the female nurses in the study area. The challenges females encounter in balancing their double burden of work in relation to their family roles and careers, place them at a critical point particularly in their choice of work and movement. This explains the marginal issues in relation to gender that are partly brought about by family pressures and location. Since female nurses

constitute the largest group of healthcare workers in most countries (Bourgeault et al., 2021), it is important to understand and translate their experiences and needs into various workplace policies to improve staffing issues.

Challenges associated with lack of necessities such as accommodation, security, equipment and social amenities (electricity, water and transport/ambulance), could be explained by Maslow's basic needs theory (Maslow, 1949). Relating this theory to rural healthcare workers retention highlights ways to improve satisfaction and lifelong learning for their individual growth. However, it was observed during this study that little attention was given to meeting the basic needs of healthcare workers, but the greater effect of the lack of necessities in these rural areas usually gets worse when healthcare workers realize that their colleagues are vacating post due to these poor conditions. This subsequently increases their workload and the feeling of loneliness (Dieleman et al., 2011). Additional problems with personal safety are created when there is poor housing near the healthcare facilities. Although better housing may be located far from the facility, this leaves healthcare workers with a critical decision to either opt for less secured accommodation closer to the healthcare facility or travel long distances.

The frustrations expressed by the healthcare workers in relation to the lack of equipment for work, was what one of the nurses voiced as 'even glucometer strips for basics testing of glucose are not available'. This, including the absence of transport (ambulance) for referral, interrupted electricity supply and the difficulties of accessing water are consistent with a current evidence where similar challenges faced by nurses, in rural Ghana, hindered their ability to provide quality maternal health care services (Adatara et al., 2021).

This study's participants further expressed language as a barrier to effective communication in the healthcare facilities. Studies have established the importance of language in providing quality healthcare (Gyamfi et al., 2017; Stern et al., 2017). Another recent study has confirm language as an important factor that could either constrain or enhance the work of community healthcare nurses in dealing with community members (Palmer-Wackerly et al., 2019). Issues related to language, therefore, need to be given the necessary attention by policy makers and health service managers for quality healthcare delivery.

Strengths and Limitations

Purposive sampling was used in selecting respondents for the in-depth interviews. Since the perceptions of individuals differ from one locality to another, the findings cannot be generalized. Nevertheless, the study has provided detailed and contextualized information to help healthcare managers understand how healthcare workers perceived their postings, factors that motivate them as well as challenges and barriers to rural practice (figure 1). This could inform health policies and improve rural healthcare workers shortage.

Conclusion

Ghana and many developing countries face the challenge of healthcare workers shortage with greater proportion skewed towards urban areas. This study provides important understanding into healthcare workers motivation and challenges associated with rural practice, thereby contributing towards building a health system that is responsive to the needs of healthcare workers.

While rural training, internship programs and orientation could potentially prepare healthcare workers psychologically and physically to work in rural areas, adequate supervisioxn and family proximity are essential to improve the feelings of loneliness, isolation and neglect in these areas. Some challenges and barriers such as inadequate security, unstable electricity supply, language barrier, lack of equipment and transport/ambulance have been identified to have negative influence on healthcare workers. In addition, postings, transfer and reshuffling processes should be transparent to healthcare workers with health managers adhering to working terms and conditions. In order to address family closeness among the healthcare workers, health managers should consider posting couples to one rural area or district.

Health Workers Interview Guide

(Expected time duration – 40 minutes)

General Information

- 1. Name of facility:
- 2. District:
- 3. Type of facility:
- 4. Time interview started:
- 5. Time interview ended:
- 6. Interview date:

Demographic Characteristics Of Respondent

- 1. Respondent's unique identification number:
- 2. Official designation:
- 3. Age (completed years):
- 4. Marital status:
- 5. Tribe:
- 6. Number of children:
- 7. Number of years worked in the facility:
- 8. Mode of posting to the health facility:

Interview Comments: This includes recording where the interview took place, mode of respondent during the interview, interactions and other non-verbal expressions of respondents that will help to understand the context of the interview.

Questions/Probes

- How were you posted to this health care facility to work?
- 2. Did you have choices to make regarding your place of work after completing school?
- 3. How do you regard your means of posting to this health care facility?
- 4. What motivates you to work in this health facility and Why. If not mentioned probe to find out if there are other source of motivation derived from the general community.
- 5. What are the major challenges and barriers you encounter working in this health care facility and the community as a whole?
- 6. How are you addressing the challenges and barriers encountered in this health care facility?

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Appendix

Author Biographies

Eunice Okyere, BSc, MSc, PhD, is an assistant professor in Public Health at Fiji National University, College of Medicine, Nursing and Health Sciences. She is a qualitative researcher who has worked on various health projects in Africa and the Australasian region. Her experience covers health systems research, health care services, nutrition and maternal health.

Paul Ward, MA, PhD, is a professor at Flinders University, Head of Public Health Discipline, Adelaide, South Australia. His research expertise includes health inequities, health services, medicine usage and provision of health and social care.

Kissinger Marfoh, MD, MSc, is a medical practitioner at Korle-Bu Teaching Hospital, Department of Public Health, Accra, Ghana. His research expertise including maternal health and health services, have contributed to improving the health care system in Ghana.

Lillian Mwanri, MD, MCN, FAFPHM, PhD, is an associate professor at Flinders University, Department of Public Health, Adelaide, South Australia. Her expertise covers qualitative research in healthy ageing, health services, maternal and child health and well as public health medicine.