

**ORIGINAL ARTICLE**

# A Case Study of Government Innovative Programmes for Increasing Access to Qualified Health Personnel in Selected Rural Districts of Zambia

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## ABSTRACT

**Objective:** To document the experiences and lessons learnt from implementing innovative programmes that aim at increasing access to qualified health workers in Gwembe and Chibombo districts by Ministry of Health and participation of health workers.

**Methods:** Qualitative analysis of the participation and satisfaction rates in retention and recruitment incentives for health workers in Gwembe and Chibombo Districts was conducted. Further document review of the current strategies implemented by the government was conducted with regards to them addressing the problems identified by the health workers based on a criterion that was developed. The study used primary and secondary data.

**Results:** The findings indicated that there was high desire by the health workers to leave their current rural job postings and this was mainly due to issues related to their living and working conditions rather than the participation or satisfaction in the existing retention and recruitment schemes. There was substantial turnover in the health workforces in both districts over the five-year period from 2005-2009, with annual losses ranging from 2 percent to 16 percent of the professional health workforce in each district. These losses were due to death, retirement and redirection. Overall, there was also very little evidence and the quality of much of what existed was weak hence the difficult to ascertain if these

interventions were contributing to an increase in access to qualified health workers in rural areas.

**Conclusion:** To retain staff in the rural areas remains a challenge because of the high desire to leave exhibited by health workers. Bundled interventions therefore coupled with strong national leadership, governance and information systems are key in ensuring skilled, motivated and supported health workers at the right place and time. In addition, a strong monitoring and evaluation system should be established to provide evidence and lessons to ascertain which interventions are or are not working and inform further policy decisions on health workforce.

## INTRODUCTION

Zambia like many other countries both in developed and developing world face a stark imbalance in the geographical distribution of health workers. More than 40% of her population is concentrated in a few urban areas, while the remaining 60% sparsely populates most of the country<sup>1</sup>. Many rural areas are inaccessible by road during the rainy season. Distances are long and it takes time to cover only a few kilometers. Similarly, modern comforts still have to reach rural areas. These problems, together with brain-drain and the higher salaries offered by international Non-Governmental Organisations (NGOs) and agencies, make it very difficult to find health workers willing to work in rural Zambia. A shortage of qualified health workers in remote and rural areas therefore, impedes access to health-care services for a significant percentage of the population.

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In 2003, the MOH initiated a policy reform process to address this critical shortage in the public sector. The Retention scheme was initiated in the public sector to recruit and retain doctors in rural areas by providing financial incentives and other non-financial incentives. In 2008, the retention scheme was further extended to other health cadres. However, the scheme has not been evaluated since it was extended to other professionals. According to World Health Organisation, the challenges faced in the expansion of the scheme especially the factors affecting other cadres need to be empirically evaluated<sup>2</sup>.

This study therefore sought to evaluate the effectiveness of the scheme and initiatives targeting other health cadres (clinical officers, midwives, nurses, pharmacists, environmental health technician and laboratory technicians) in attracting, recruiting and retaining them in rural and remote areas by focusing on the satisfaction of the health workers with regards to the initiatives that they were participating in.

## **METHODS**

### ***Ethics Statement***

Approval was sought from the UNZA Biomedical Research Ethics Committee. Additionally, permission was sought from Zambia Forum for Health Research (ZAMFORH) on the use of their Human Resource for Health project data.

### ***Study design***

A case study design using qualitative approach was adopted for this study. Both primary and secondary data were used. Secondary data was obtained from the ZAMFOHR Project entitled “*Evaluating the Availability of Adequately Trained Health Care Providers in Rural Zambia through Competency Assessment and Outcome Mapping*”. Primary data was collected through documentary review of policy documents.

### ***Study sites***

The two districts sampled by the ZAMFOHR study were adopted as study sites.

### ***Sample Size***

The study selected a case of government innovative programmes for increase access to qualified health personnel in rural areas. Purposive sampling was used to sample documents for document review.

### ***Data collection methods***

For secondary data, the researcher with permission from ZAMFOHR, used the data already collected from Gwembe and Chibombo for analysis. The tools that were used are the Key informant interviews and Focus Group Discussion guides.

Document review of policy documents and other published and unpublished materials that reported on the initiatives/ schemes was conducted with regards to increasing access to health workers in rural and remote areas. A check list was used for the document review.

### ***Data management and analysis***

For the Focus Group Discussion data, all data sources were transcribed verbatim and imported into QRS Nvivo 9. A detailed list of codes was developed and an iterative coding approach taken by first coding broadly into the broad nodes and later coding finely into the child nodes. The list of codes was then generated and approved by principal investigator. All transcripts were thematically coded and analyzed.

The document review was based on the extent, to which the chosen intervention was relevant and adequate to the needs and expectations of the health workers. Relevance meant the extent to which the objectives and the elements of the intervention were consistent with health workers' needs in the rural and remote areas. Adequate meant the extent to which these interventions addressed the needs of the health workers in rural and remote areas.

## **RESULTS**

### ***Characteristics of respondents***

Three quarters of respondents reported a professional diploma or certification as their highest level of education. Nurses were the most common professionals

in the sample, accounting for 40 percent of respondents, followed by midwives at 14 percent. Professions other than those listed accounted for 13 percent of respondents. Doctors made up 7 percent, clinical officers 11 percent, environmental technicians 9 percent, and pharmacists 1 percent.

The largest group of respondents by age was under 30 at 39 percent, followed by the 30-39 age group at 30 percent. 18 percent were in their forties, 13 percent in their fifties. Thus most respondents were under 40, and none were under age 20 or over age 60. The sample was nearly evenly split between sexes, with 51 percent of respondents being male and 49 percent female.

### ***Status quo of the current incentives***

In the two districts, based on the data collected by the ZAMFOHR research, there were nineteen health worker retention and recruitment schemes. These were the Zambia Health Worker Retention Scheme, the rural and remote hardship (salary) allowances, allowances for housing, uniform maintenance, night duty, overtime and on-call. Others were professional development prioritization for rural and remote health workers, electrification/solar power and water provision, provision of transportation (motorcycle) and radio equipment provision, a graduate retention allowance for health workers with university degrees, and an allowance for workers involved with the Churches Health Association of Zambia (CHAZ), a faith-based organization.

### ***Success of the Recruitment and Retention strategies***

There were variations in the level of participation from scheme to scheme. The schemes with the highest participation were rural hardship and uniform allowance where 80 percent of the respondents reported to receiving these while 69 percent of them received commuted overtime allowance. This was reported to be motivating. Housing allowance was also seen to be effective only when one was staying in the institution house. Even though housing allowance was reported to be successful, the quality of accommodation provided by the institutions was in a bad state otherwise, rented houses were more expensive than the housing allowances that were being received. The schemes with the lowest participation were

the child education and car loan components of the ZHWRS, the graduate retention allowance, and the rural professional development priority, with fewer than 5 percent of respondents indicating that they had participated in these schemes.

The respondents were also asked to indicate the level of satisfaction with each of the scheme they were involved in. The schemes with the highest level of satisfaction reported by the participants were:

1. ZHWRS salary top-up,
2. Water provision,
3. Electrification,
4. ZHWRS professional development and
5. Rural hardship allowance, in that order.

### ***Improvements of the Recruitment and Retention strategies***

In order to retain staff in the rural areas the respondents suggested the following:

#### ***a) Increments in financial and non-financial incentives***

The specific initiatives mentioned were the rural hardship and housing allowances. These were the initiatives that were mentioned as the most successful. The respondents also requested for free transport to town to get their salaries while others said if the government gave loans it would make thing easy in terms of transport.

#### ***b) Improvement in infrastructure***

Improved infrastructure such as construction of better houses, provision of good water and electricity supply were cited by the respondents. The improvement should benefit both the health facility and houses for health workers. A request for things such as laboratory, mortuary, maternity wards and toilets was made to upgrade the standards of the health facilities. In order to upgrade the standards the participants requested for an improvement in the schools so that their children get similar education standard with those in towns.

### ***Professional development Activities***

According to the respondents most of the trainings and workshops were being provided by donor partners like

JSI, UNICEF and ZPCT. However, the distribution of these trainings were not even, the NGOs were not in all the health facilities which implied that some health workers were not accessing some of these workshops and trainings. As seen so far the government relied more on the donor partners to assist with the professional development. This over dependence had deprived some who have none or few donor partners opportunities to upgrade their knowledge and skills. In most cases donor partners had a particular public health issue of interest in the district. As a result they would not train people in all areas of interest.

- *Satisfaction with professional development*

The process of offering the sponsorship was reported to be too long and the Ministry only sponsors for short courses (3 months). The rule for the sponsorship which says that one had to be confirmed before they could be sent to school was prohibitive. Shortage of staff in the health facilities restricts the opportunities of professional development. The workers in the rural areas felt disadvantaged because the opportunities to access professional development were poor compared to those in towns.

#### *Thoughts of and reasons for leaving the district*

There was a mixed view about the issue of wanting to leave the health facility. 27 percent of respondents reported that it was not at all likely they would leave their jobs in the coming year. Some 20 percent said it was not very likely, 30 percent said it was fairly likely, and 23 percent said it was very likely.

Reason for wanting to leave were mainly poor accommodation, lack of good schools for children, lack of promotion, lack of sponsorship for further studies and increased work overload due to staff shortage. Despite living and working with some difficulties others wanted to leave because of marriage, either to join the partner or to go and search for one. There was a complaint on lack of communication which made them lose contact with their loved ones.

- *What could change their minds*

In order for the staff to stay in the rural areas, they requested for an improvement of accommodation by

building more houses and renovating the old houses and improved communication and transport network. The other improvement requested was the increment in the salaries and remote allowances. They also requested for the extension of the retention allowances to everyone. If the part time allowance was brought back it would motivate them to stay.

#### *Turnover*

There was substantial turnover in the health workforces in Chibombo and Gwembe over the five-year period from 2005-2009, with annual losses ranging from 2 percent to 16 percent of the professional health workforce in each district. These losses were partially mitigated by inflows of new health workers. Over this period, there was a 3 percent net gain of professional health workers in Chibombo and an 8 percent loss in Gwembe. The majority of staff losses were reported as being due to deaths, retirements, and redirections (staff moves directed by administration). However, both districts reported being dramatically understaffed, with many unfilled positions.

## **DISCUSSION**

#### *Trends in Health Workforce*

From the results obtained from the study, job satisfaction and consequently willingness to remain in the rural areas was influenced by a complex interplay between individual factors, living environment and working conditions. This is consistent with the trends in health workforce that were identified by WHO<sup>3</sup>.

#### *Mapping Policy Interventions*

The government recognizes that health workers face a lot of challenges in rural and remote areas and as such, a number of strategies were developed to address this. This can be summed in three main categories of interventions as developed by WHO: Education and regulatory interventions, monetary compensation and management, environment and social support<sup>4</sup>.

Going by this, most of the problems that were identified by the health workers in the two districts have been adequately addressed through the innovative documents that have been put in place to some extent, since the data

was collected in 2010; the Ministry of Health has come up with a number of documents that address them. The preceding documents were not evaluated extensively and as such, one cannot ascertain their effectiveness. One key issue identified in the 2 districts by the health workers that is not addressed and not reported is the child education allowance. Education of the children was considered as one of the reasons for the health workers wanting to leave their current work station in the two districts.

### ***Aligning choices of interventions with location***

Findings from the two districts indicated that most of the respondents emphasized that the living and working conditions influenced their decision to stay or leave rather than the allowances and these are not addressed in the recruitment and retention schemes. This is consistent with Intra Health International who stated that health workers are more likely to remain in an organization that offers a combination of benefits to boost job satisfaction<sup>5</sup>.

Rural hardship and housing allowances, which are incentives that are not only applicable to health workers in rural areas but the entire public service employees were the most successful incentives in encouraging the health workers to remain in their stations implying that the retention and recruitment in the rural districts can not only be tied to Ministry of Health initiatives. The success could be also attributed to the fact that these incentives have been in place longer than the Ministry of Health incentives hence well established.

### **Bundled Interventions**

An important finding from the health workers is that no single intervention is effective, as the recruitment and retention factors are complex and intricate. The health workers mentioned increase in allowances, education opportunities and improvement in management, environment and social support such as roads, communication and education for children.

Bundled interventions are also in line with the WHO Global policy recommendations to increasing access to health workers in remote and rural areas through improved retention. The specific recommendations are

grouped under the following: Education, regulatory, financial incentives and personal and professional support<sup>6</sup>

The high turnover in the two districts was as a result of death and retirement rather than resignation and request for transfers. Van Dormel highlights turnover as partially a result of job dissatisfaction, which induces not only demotivation and absenteeism, but also intentions to quit<sup>7</sup>. This therefore could to some extent mean that the schemes have had some success considering the reasons for the turnover in the two districts.

Lack of evaluation also entails there is no evidence to show the impact and effectiveness of interventions. There is very little rigorous evidence to support any financial, regulatory, education or management interventions to improve access to health workers in remote and rural areas. Financial incentives such as housing allowance are not reviewed for long periods hence they tend to be overtaken by events making them less attractive as evidenced by the responses from the health workers who reported that the housing allowance was lower compared to the rentals they pay for their accommodation. This therefore, entails that there is no documented evidence that these interventions are working or not and their scaling up is not supported by evidence and lessons learned.

### **LIMITATIONS OF THE STUDY**

The limitation of the study was that no formal interviews were held with Ministry of Health on the effectiveness of the innovative programmes currently in place. This could not take place as no evaluation was conducted on the initiatives. The researcher was advised to refer to working documents of the Ministry where information could be obtained on the different strategies the Government had put in place and this was done.

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