Incentives among Health Workers in a Remote Kenyan District: Implications for Proposed County Health System

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Abstract: **Introduction**. Attracting and retaining health workers in remote rural areas is a challenge in Kenya. Devolution of the Kenyan health system may negatively affect worker retention; incentives may play a role in retaining health workers. **Methods**. Semi-structured questionnaires were administered to health workers and human resource data reviewed. Analysis was for descriptive and emerging themes. **Results**. Health workers were employed under three different terms of service. The majority receive a monthly hardship allowance in the range of $7.5-94. Only five percent of health workers were able to engage in private practice. Available housing, water supply, electricity supply, and educational facilities were cited as inadequate. With the proposed devolution to county governments, 97.3% of respondents preferred to work in a different county. **Conclusion**. There may be need to harmonize the terms of service, improve the incentives, and amenities available to health workers in remote Kenyan counties in order to improve retention.

Key words: Kenya, incentives, health workers, remote areas.

Africa suffers from inadequate health workers, with a deficit of 2.4 million doctors, nurses and midwives.[1] The continent has 2.3 health care workers per 1,000 population, while the Americas have 24.8 health care workers per 1,000 population.[1] The World Health Organization (WHO) recommends a minimum of two physicians per 10,000 population. In sub-Saharan Africa, 29 countries have fewer than this proportion.[1] Reasons for this shortage include migration of health workers to developed countries due to better terms, poor working conditions, and the HIV/AIDS scourge.[1] The distribution of workers within these countries is further skewed in favour of urban areas. Kenya is one of the countries in sub-Saharan Africa with critical shortages of health care workers. It currently has 1.46 health care workers per 1,000 people compared to WHO's recommended 2.5 health care workers per 1000 people.[2]

Distribution of these health workers is further skewed in favour of urban areas.

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Remote rural areas face huge challenges in recruiting and retaining health workers. North Eastern province, Kenya is one such area. It is home to six percent of Kenya's population and three percent of its health care workers. This compares unfavorably with other provinces (e.g., Nairobi which is home to eight percent of the national population and nine percent of the nation's health care workers).[2]

Key factors that motivate health workers are financial incentives, career development, continuing education, work environment, equipment and medical supplies, hospital management, personal recognition, and appreciation.[3,4,5] Of these, three core factors are financial incentives, career development, and management issues. WHO includes among financial incentives not only salary and wages but all additional benefits provided to health workers to entice them work in remote areas. This includes monetary allowances, free housing, and other benefits to offset the opportunity cost associated with working in remote areas.[4]

Developing countries have implemented health sector reforms in a bid to improve their health systems. Decentralization is one such reform and it involves delegation of powers from the central to the provincial and district levels. It can be defined in general terms as the transfer of power in planning, management, and decision-making from the national level to sub-national levels of government. Various functions can be decentralized to varying degrees. This can be in terms of legislation, policymaking, revenue generation, regulation, planning, resource allocation, management, training, and interagency coordination.[6]

Devolution is one administrative category of decentralization. It involves legal transfer of administrative powers to political units. The health care providers then come under the management of non-health managers.[6] Devolution aims to improve the efficiency and effectiveness of health service provision through reallocation of decision-making and resources to peripheral areas. This more local transfer of control is viewed as a way of implementing the primary health care strategy of increased responsiveness of health systems to local needs.[7] Uganda decentralized its health system under the decentralization policy of 1997. Under the Local Government Act of 1997, health centers and dispensaries were transferred from the central government to local governments. Health workers were also transferred to the districts.[8] In Mali, decentralization involved the delegation of management of health centers to community health associations beginning in 1990. This was followed by devolution of decision-making power to locally elected governments beginning in 2002. Transfer of health workers from the civil service to local governments began in 2011. Training and performance-monitoring remains the central task of the District Health Management Team (DHMT), which reports to the ministry of health.[9] Tanzania decentralized its health system through the creation of district health boards and county health management teams. This improved the management of health services through increased flexibility in planning and ownership of health projects.[10]

Kenya decentralized its health sector in the early 1980s in line with the District Focus for Rural Development Strategy, which identified the district as the most basic and effective unit for planning, development, and delivery of public services.[11] In 1994, the Kenya Health Policy Framework Paper (KHPFP) was introduced. It identified decentralization as the key management strategy.[11] Under decentralization, districts

form the pillar of the health system. Management of health care at the district level was headed by a medical officer of health and supported by a district health management board. This board is made up of officials appointed by the ministry of health and representatives of the local community. It administers cost-sharing schemes, governance, allocation, and distribution of funds. It also makes recommendations on expenditures and budgets to the district development committee. There is also the District Health Management Team (DHMT) which is the technical team. It plans, implements, and monitors all health activities in the district, and reports, generates, and controls expenditures of voted financial resources.[11] Health workers are employed by the central government and are supervised by the DHMT. Kenya is in the process of devolving its health system in 2013, after enacting a new constitution in 2010. There will be county governments headed by a governor and these will have a county public service which will provide basic services. The county governments are now in place and are gradually taking over the health services. The county government is required by the constitution to hire its public service personnel, and the bulk of the health workers will work at this level. Health workers will be transferred to the county governments based on yet-to-be-agreed-upon government-wide terms and conditions on transfer of human resources.[12] This study considered incentives and amenities available to health workers in a remote district in view of the proposed devolution of health services in Kenya.

Methods

The present study was conducted in Ijara district, North-Eastern province. Ijara covers an area 9,642 km2 and is located in Garissa County.[13] It is inhabited predominantly by the Somali ethnic group, who mostly rear livestock. Ijara has a population of 92,663 and 13,180 households.[14] Garissa County has a youthful population, with 45% of the population being in the age group of 10-29 years. Children under five years of age comprise 14.6% of the population. Garissa County is one of the poorest in the country, with close to 73% of the population living below the poverty line.[15]

The district has 14 health facilities. These are seven dispensaries, three health centers, one sub-district hospital, one district hospital, and one mobile clinic (Figure 1 & 2). The study population was health workers. At the time of the study, the district had a total of 76 health workers. These comprised 31 nurses, 10 registered clinical officers, three pharmaceutical technologists, nine laboratory technologists, two nutritionists, two counselors, 10 public health officers, one doctor, two health information and records officers, and six community health extension workers.

A self-administered questionnaire was used to collect data. Each questionnaire was accompanied by an envelope. The respondent was instructed to insert the completed questionnaire in the envelope and to seal it. Written informed consent was provided. Secondary data on human resources at the district level was reviewed. This included district annual report for 2011, staff returns, and departmental reports for nurses and public health officers. The study excluded support staff (e.g., drivers and store men). The study was approved by the District Health Management Team, Ijara and it was conducted during the months of March to May 2012.Data were analyzed using SPSS version 16 for descriptive statistics.

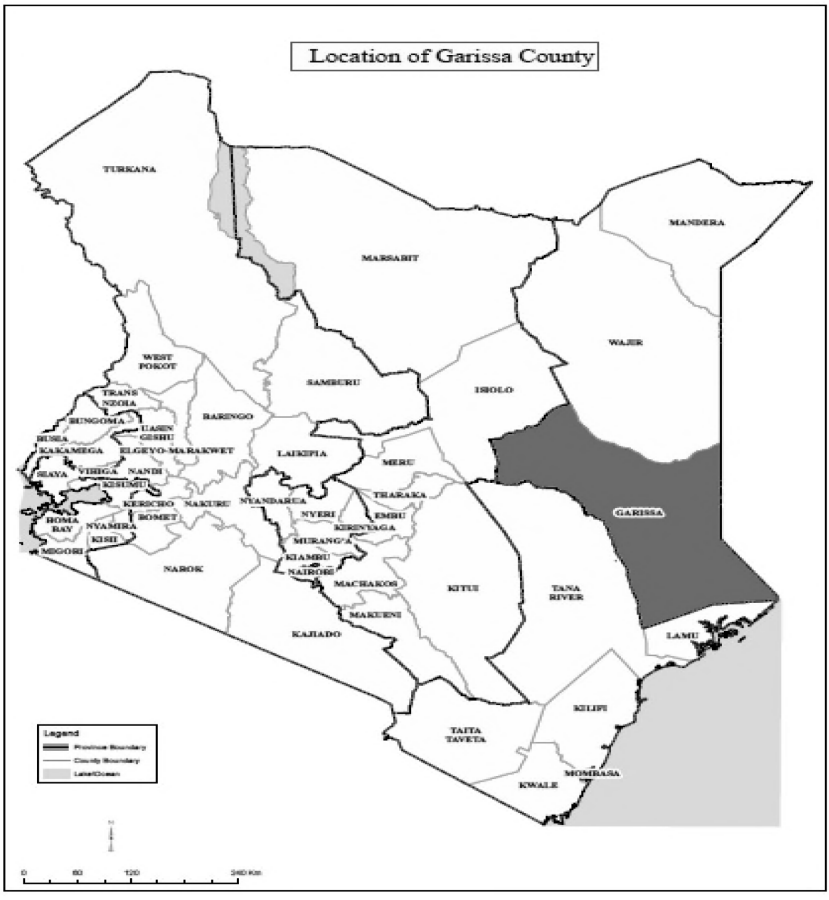

Figure 1. Map of Garissa County, Kenya (Source: Kenya National Bureau of Statistics, 2013).

Qualitative data obtained from open ended questions were analyzed using thematic analysis. This entailed reading and re-reading the responses, which were then typed up and saved as electronic files. Labels were generated to identify important features of the data. This was followed by search for themes whereby themes were examined together with collated data. Finally, identified themes were refined and some were split.[16]

Results

A total of 38 health workers were interviewed. Their mean age was 34.4 years and mean years worked in Ijara district was 3.6. Only 10.8% of health workers lived with their families, and 50% of them visit their families after three months, 23.5% after two months, and 12% monthly. The mean costs incurred in travelling one way to see their families were 3,660 shillings ($46). The majority (84.2%) are Christians. Working in Ijara had a negative impact on family life among 65.7% of health workers. Only 65.7 % of health workers were paid a monthly hardship allowance which ranged from 600 shil-

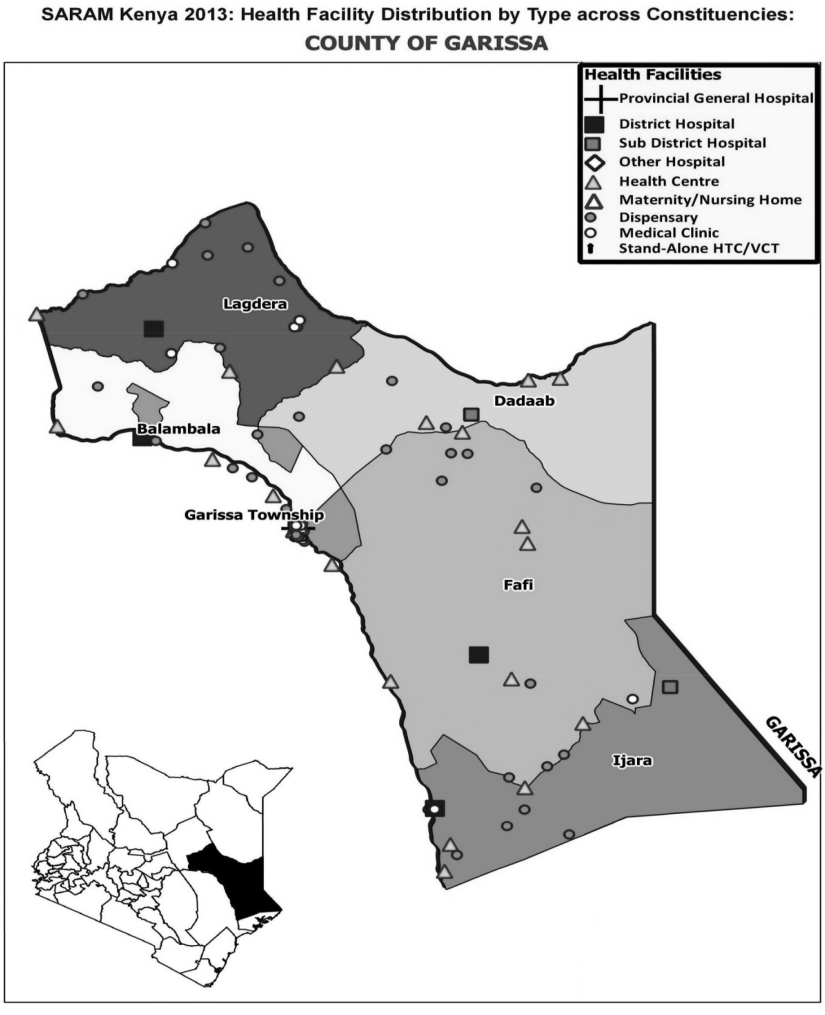

Figure 2. Map of Garissa County showing Health Facility distribution.

lings ($7.5) to 7500 shillings ($94). This amount was viewed as inadequate, and a mean allowance of 22,000 Shillings ($275) was recommended.

With the proposed devolution, 97.3% of health workers would prefer to work in a different county from the one where they presently work. Nairobi was the most frequently preferred county (32.4%), followed by Nakuru (18.9%). Six major themes were given for the preferred county. First were family reasons. Respondents felt they would be near their families, spend less money and handle responsibilities more effectively. Others also felt it would enable to settle down and raise a family. Some of the comments on this point follow:

- It is my home county.
- I will be nearer to my family members and I will spend less on travelling expenses.
- It is economical to work in my county.

- It would be much easier to take care of my aged parents and my deceased brother's children.
- I need to raise a family.

Education-related reasons were also given consideration. These included both the respondents and their children accessing good quality education:

- My daughter will have a good education.
- I can easily further my studies.
- I want to be near the institution I want to study to advance my studies to degree level.

Respondents chose counties where there were opportunities to earn extra income through part time private practice:

- There are many opportunities for part time jobs unlike North Eastern Province.
- There are locum opportunities.*

Respondents also preferred counties which have more developed infrastructure and favourable weather:

- Mombasa is not as harsh as Garissa County.
- It is a non-hardship area.
- Area has good food security and there is good communication especially roads.

Respondents also felt their work output would improve if they worked in their local set up:

- I will be able to serve patients even better because communication to most locals is a problem in my current station.

Respondents were also uncertain on how the county government would operate and whether they would be able to get a transfer:

- I fear the Garissa county government may retain me here.

Over half (58.3%) of health workers are paid an extraneous allowance in addition to their hardship allowance. This was in the range of 4000–12500 Shillings ($50–156). This allowance was cited as being at least half of the basic pay among 40% of health workers and 23.8% of health workers termed the amount as adequate to motivate them.

On amenities available, 21% of health workers were provided with a house and 11% stated they would enroll their children in local schools (Table 1). Review of human resources data at the district level indicated that the district had a total of 80 health care workers as of December 2011 employed under three different terms and differentially remunerated. The first are employed by the Public Service Commission on permanent and pensionable terms. They constitute 65% of health workers. The second are those employed by the government under the Economic Stimulus Programme (ESP) on three-year contracts.[17] They constitute 25% of all health workers. The third are those employed by Capacity Project. This is an emergency hiring initiative funded by United

*_Locum_ refers to moonlighting by health workers to earn some extra income.

Table 1.

AMENITIES AVAILABLE TO HEALTH WORKERS IN IJARA DISTRICT

	Number of health workers responding in the affirmative	%
Provided with a house	8	21.1
Lives in a spacious house with adequate privacy	5	13.9
Has adequate security	14	37.8
Lives in a house which has lighting—electricity or solar	19	51.4
Has regular access to water of good quality	14	37.8
Has access to a television	4	10.8
Has access to cable Television	2	5.4
Has access to a bank or an agent of a bank	10	27
Has access to cell phone money transfer services e.g. mpesa	29	76.3
Good quality education is available for one's children	4	11.1

States Agency for International Development (USAID). They are on one-year contracts, with a gratuity of 31% of annual basic salary being paid at the end of the contract. They constitute 10% of all health workers. The financial incentives for working in this hardship area vary among these workers. Those employed by Public Service Commission (PSC) are paid a monthly hardship allowance of between 600–1,200 Shillings ($7.5–15) and a monthly extraneous allowance of 7,500–12,500 Shillings ($94–156). Health workers employed under the Economic Stimulus Programme receive no hardship allowance or extraneous allowance. Those employed by the Capacity Project are paid a monthly hardship allowance of 10,000 shillings ($125).

Discussion

The majority of respondents would prefer to leave Garissa County in light of the proposed devolution of the national health care system. The workforce has been shown to be a critical factor in contributing to the success or failure of reforms.[18] Garissa County already has a shortage of health personnel and this is worsened by a high turnover of health workers, a situation posing a major hindrance to health care service delivery in the county. For instance, the doctor population ratio is currently one doctor per 41,538 people and the nurse population ratio is one nurse per 2,543 people.[15]

In Kenya, devolution was to be implemented after the elections in March 2013. The government published a legal gazette notice on August 9th, 2013 transferring health services to the counties. In this notice, the national government indicated that the payroll of health workers would be transferred to the counties after six months. Currently, most counties are carrying out audits to determine the number of employees

in their jurisdictions. The health workers' unions (namely, The Kenya Medical Practitioners' Pharmacists and Dentists Union, Kenya National Union of Nurses, and the Kenya Health Professionals Society) moved to court on 2nd September 2013 seeking orders to stop transfer of health services to the county governments. The case is yet to be determined. The health workers' union are planning a strike in late November 2013 (subsequent to when this article goes to press) to press for their case.

Once fully established, the county government will recruit health workers anew and pay them. The dynamics of supply and demand may come into effect. More developed counties are likely to attract more highly qualified health workers compared with than remote ones. Remote and poorer districts in decentralized systems in China and Tanzania could not compete for qualified health workers with central governments or richer districts; equalization mechanisms were also lacking.[10,19] In Tanzania, recruitment of health workers had to be recentralized to enable remote districts acquire health workers. This is because they could not compete with more developed districts when recruitment was decentralized.[10]

In Mali, the local government hired workers from within the locality, who were familiar with the rural setup and who were more likely to work there. Though this was only effective with lower cadres, and not among highly skilled staff such as nurses and doctors, who were more likely to work for the central government, which offered better terms. Postings in remote rural areas were used as a stepping stone into central government employment, preferably in urban areas.[9] In this district, the majority of health workers are non-locals. In general, they are Christians, while the area is predominantly Muslim; many may prefer to leave for more culturally familiar places. Devolution in Uganda saw the establishment of independent district service commissions. These had powers to recruit, discipline, and promote health workers. These commissions were perceived to be influenced by tribalism and patronage in staffing decisions.[8] There was also deterioration of salaries, working conditions, and career structures of devolved civil servants due to poor revenue base of local authorities.[18]

Financial incentives have been shown to improve the retention of health workers in remote rural areas.[5,20] The health workers are differentially remunerated as they are employed under three different terms of service. Those employed under the economic stimulus plan seem worse off. These workers (mostly nurses) were instrumental in the re-opening of seven health facilities, mostly dispensaries that had been closed due to lack of staff.[15] Under this plan, nationally a total of 4,200 nurses were to be recruited.[17] Ijara district was allocated 20 nurses but was unable to attract that many. A plausible reason is that available nurses opted to work in more developed districts.[15]

Nearly all health workers interviewed do not engage in private practice on a part-time basis. Thus, they have no other source of income other than their remuneration. This was cited as a reason for preferring an area with more opportunities for part time work. The majority also felt the allowances paid were inadequate. That is, they could not offset the opportunity cost associated with working in this remote area (loss of income from private part-time practice). Being a remote area, the health workers also spend more in travelling costs to see their families. As of July 2012, the Public Service Commission increased the extraneous allowance, with a nurse in a hardship area earning 25,000 Shillings ($313) up from 12,500 Shillings ($156). This means that

a nurse employed by the Public Service Commission earns nearly twice what a nurse employed by the Economic Stimulus Programme earns. Nurses in Kenya embarked on a nationwide strike in December 2012, citing this disparity in pay as one of the reasons. These different terms of services have been cited as a major cause of inequity, and possible loss of motivation among health workers in Garissa County. This inequity is confounded by the fact that the terms of service for some contract staff are not clear, leaving them, and the health managers, in a state of uncertainty about their future.[15]

The majority of health workers are married, but do not live with their families. This may be due to inadequate housing and educational facilities. The quality of education provided by local schools was perceived to be wanting, and the majority would not enroll their children in local schools. Available housing is inadequate, with only one in five health workers living in a spacious house with adequate privacy. Social amenities such as housing have been shown to influence the likelihood of health workers taking up a rural posting.[21] Health workers working at the district headquarters are able to rent houses. These are mostly single rooms constructed of stones; some have electricity and an intermittent supply of water. Those in more remote health facilities have no access to rental houses and have to do with the housing provided at the facility. This could be why over half of respondents prefer to work in Nairobi and Nakuru counties, which are well-developed counties. The capital city of Kenya, Nairobi, and the fourth largest town in Kenya, Nakuru, are located within these counties. Recently, staff houses have been constructed in some health facilities in Ijara by donors and the government in a bid to alleviate the housing shortage.

The present study has a number of limitations. The majority of health workers are nurses and Ijara district had only one doctor at the time of study. Thus, this study cannot provide an estimate of what sort of incentives would be required to retain this cadre. The sample size was small, and there was the likelihood of response bias from the respondents. Therefore, we urge caution in generalizing these findings. Kenya has 47 counties, 14 of which are classified as least developed, one being Garissa County. These counties lag behind the national average standard for a particular service, and will receive extra funds from an equalization fund. These counties are characterized by widespread poverty, food insecurity, water scarcity, inadequate educational facilities, impassable roads, and harsh terrain. The study findings may apply to these areas.

Conclusion. As devolution is implemented in Kenya, remote counties may be disadvantaged in the recruitment and retention of health workers. There may be a need to offer adequate incentives for each cadre, and to harmonize remuneration among health workers of similar qualifications and experiences. There is also a need to improve amenities available to health workers.

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