

Original Research Article

Effect of devolution of healthcare services on the motivation and retention of medical personnel in Bungoma County

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ABSTRACT

Background: In struggle to achieve sustainable development goal (SDGS) number three ‘good health and well-being,’ populace is at liberty to be treated by a trained, motivated and valued medical workers. Nevertheless, the challenge of medical workers’ motivation and retention persist in Bungoma County, Kenya, Africa and universally. In a devolved healthcare system implementation, medical workers ‘motivation and retention is vital, but it has grown a predicament of devolution of healthcare. Transition of power from national to county governments has however created turbulence in enthusiasm and retention of medical workers at Bungoma County marked within consistency, poor understanding of health system, management issues and lack of coordination between the two levels of government.

Methods: A cluster sample design was used to select 299 health care providers to participate in the study. Data was collected using structured questionnaires and a Focus Group discussion guides.

Results: In view of retention: 50.9% (152) of the respondents affirmed their zeal to remain working for Bungoma county while 49.1% (147) would walk out of which 26.9% (40) would prefer NGO, 11.7% (18) out of the country, 6.3% (10) in FBOs and 4.2% (7) in private institutions. Inadequate staff, transport, inadequate supportive supervision, essentials (gloves) contribute to dissatisfaction of medical workers.

Conclusions: Senior medical professionals in specialized services are leaving Bungoma County for better working condition and the morale of staff is low due to remunerations.

Keywords: Drive and retention of medical personnel, Remuneration, Maslow’s theory, Herzberg’s two factor theory

INTRODUCTION

The fundamental prerequisite for an effective devolved healthcare system characterized by enhanced quality of care, user satisfaction, equity, and efficiency is qualified, motivated and satisfied healthcare workers (HCWs). Concurrently, successful implementation of such healthcare management system relies heavily on how much support the HCWs receives, however, there is inadequate concentration given to health human resource motivation, retention and satisfaction.^{1,2} Developing countries begun adopting devolved healthcare system.³

Various Sub-Saharan Africa (SSA) countries have implemented devolved healthcare system.⁴ Kenya’s healthcare devolution saw the creation of 47 new county administration systems.⁵ Moreover, preceding academic studies relating to HCW in Kenya have mainly focused on the roles of clinical officers (COs), contextual influences of motivation, tools to measure motivation.³ There is little consideration of how devolution affects HCWs as the principal actors in health resources utilized.⁶ From abroad view, problems of the HCWs affect their interaction with service consumers and the leaders of health/care devolution reform.⁶

There being limited evidence on HCWs motivation and retention in developing countries, Luboga et al study went beyond identifying the technical determinants of HCW motivation and retention by analyzing the prospective effect of devolution to motivation, satisfaction and retention of health workers in a highly politicized Bungoma County context.

Before devolution health workers attrition rates from 2004 to 2005 were alike across different types of health facility: provincial hospitals losing an average 4% of their health workers, compared to 3% for district hospitals and 5% for health centers.⁹ After implementation of devolved healthcare system in accordance to the 2010 Constitution of Kenya no study have provoked to know attrition rate and underlying factors.

Bungoma County was handed over 1441 health workers (service availability readiness and mapping 2012). By 2013 the county had remained with 924 health workers (County Health Information System 2013), however there have been no research done to explain the difference.

Additionally, the county had the lowest facility density of <1 per 10,000 population in Kenya with doctor population ratio of <1 to 10,000 population, nurse population ratio of 3:10,000, clinical officer population ration of 1:10,000 and missing some specialists such as orthopedics, psychiatrist and dermatologists at the time of handing over (SARAM, 2012) but the current status on their retention and motivation is not known post implementation of devolved healthcare system. However, no one looked at their congruence with devolved healthcare system in relation to motivation and retention.

Significance of this study were that this study explored the effects of devolved system on drive and retention of healthcare services provider's in Bungoma County and suggested policies frameworks on how to augment health provider's retention. The findings from this study highlighted tribulations of health providers' retention and expounded use of drive to increase health staff retention in Bungoma County. Since few studies on health workers drive and retention have been done in Bungoma County, this particular study has to inform policy and decision makers on the state of affairs since devolution took shape and would contribute in the furtherance of academic interest on the subject among future scholars.

METHODS

Study design

The study used descriptive cross-sectional study design since it involved data collected at a defined time and examines relationship between devolution and HCWs retention and motivation among selected health workers which was conducted between November 2015 and January 2016 in Bungoma County.

Study area

The study bound itself to Bungoma County's 11 county and sub-county hospitals, 16 health center, 78 dispensary, 27 clinics and 4 nursing homes/maternity and 134 community units (District Health Information System 2016).

Target population

It consisted of 924 healthcare services providers in public health facilities in Bungoma County (DHIS, 2013). These health workers comprise of medical personnel among them consultants, medical officers, clinical officer, nurses, medical lab technician, radiographers, health record officer, health administrator and pharmaceutical technicians

Sample size

Fisher formula,

$$N_0 = \frac{Z^2 PQ}{e^2}$$

Where,

Prevalence was 50%

Confidence level was 95%

Margin error was 5% (e= 0.05)

$$N_0 = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2} = 384.16 = 385$$

Since the total population (N) is not large in comparison to number, the finite population correction will be calculated.

$$N = \frac{no}{\left(1 + \frac{no}{N}\right)} = \frac{385}{\left(1 + \frac{358}{924}\right)} = 271$$

Bearing in mind 10 % non-retort rate, the ultimate sample size was 299.

Sampling technique

Stratified sampling was use to categorize medical personnel into the nine sub-counties in Bungoma County, county and sub-county hospitals were chosen purposively one from each sub-county because they provide the largest percentage of health care services in their respective sub-counties. Proportionate sampling was used to get the number of medical personnel from each hospital.

Then simple random sampling was used to sample study participants from payroll after stratification was used to classify them into professional cadres. Subsequently from each stratum the study participants were proportionally

selected from all categories of health personnel by lottery method.

Inclusion criteria

All medical service providers working in Bungoma County and are present on duty during the visit were included.

Exclusion criteria

Staffs on leave; maternity, annual, sick, emergency and compassionate. All staff not on county payroll and students on attachment and internship were excluded.

Data analysis

Collected quantitative data was coded and entered into epi-data version 3.1 and analyzed using bi-variate and multi-variate analysis for the associations and determinants of health worker motivation and retention. Descriptive statistics was used to summarize the data and the results presented in frequency tables, charts, graphs and percentages.

Crude odds ratio with 95%CI was used to determine presence of association between explanatory variables and level of job satisfaction of respondents. The degree of association between dependent and independent variables was measured using adjusted odds ratio with 95% confidence interval at significance level of ≤ 0.05 .

Qualitative data was managed and analyzed in descriptive by use of NVIVO software.

Ethical consideration

The researcher got approval from ethical committee of the university before getting approvals from the ministry of health and county government to collect data. Before issuing questionnaire, prior explanations were offered to participants.

Benefits of the study were discussed then informed consent given before collecting data. Assurance of privacy and confidentiality of the information was given.

RESULTS

Distribution of health care service providers

Nurses were found to form majority of health care workers at 20.5% in Bungoma County. Tongareni and Sirisia sub-county had the highest proportion of nurses accounting for 27.3% and 17% of the support staff. As evident on Table 1, 17% of all staff interviewed were support staff.

These were more in Kanduyi at 35% compared to others at 32% ($p < 0.0001$).

Training institutions

A higher proportion of respondents went to government training institutions (41.9%) compared to 22.2% who trained in private institutions ($p=0.004$). while (35.9%) could not give information about their training. This is as indicated in Figure 1.

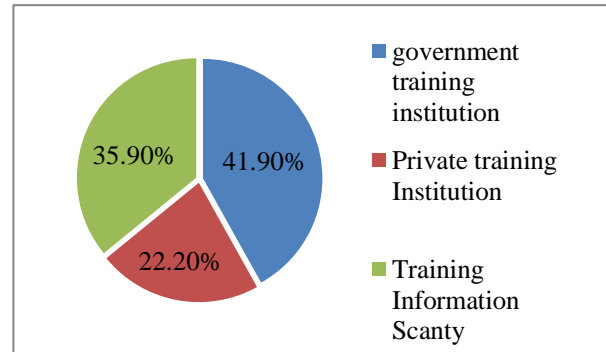


Figure 1: Training institutions.

Preference of where to work

Given an opportunity, 50.9% of the respondents would prefer NGOs, 26.9% Government, 11.7% the country, 6.3% FBOs and 4.2% private institutions. The preference to work in NGOs was higher in Kanduyi 56% compared to Webuye 47.8% and Mt.Elgon 46.7%.

The preference to work for government was more common in Mt. Elgon 36.7% compared to Webuye 24.6% and Kanduyi 23.3% (Figure 2). On average respondents had eight years since qualification and had worked for the current facility for an average of five years (Figure 2).

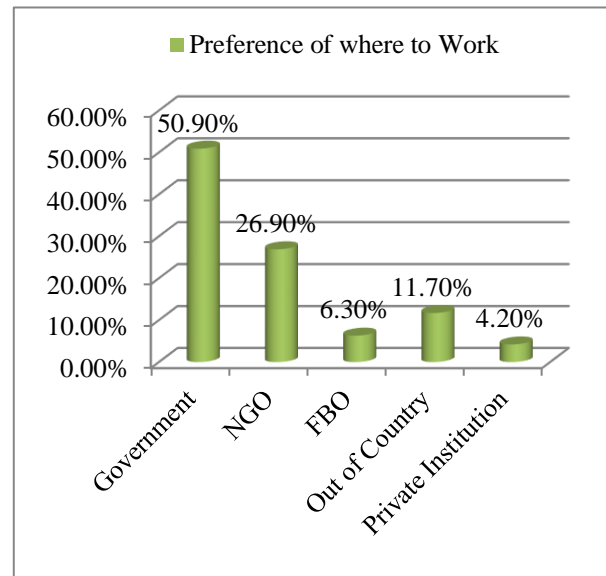


Figure 1: Preference of working institution.

Work environment

Work environment factors affecting motivation and retention

The findings in Figure 3 show the comparison of work environment factors in government health facilities and how they influence service delivery. Among the most striking differences was adequacy of supplies (43.1%, $p < 0.001$), good access to drugs (57.9%, $p < 0.0001$) and safe and clean water at work places (57.9%).

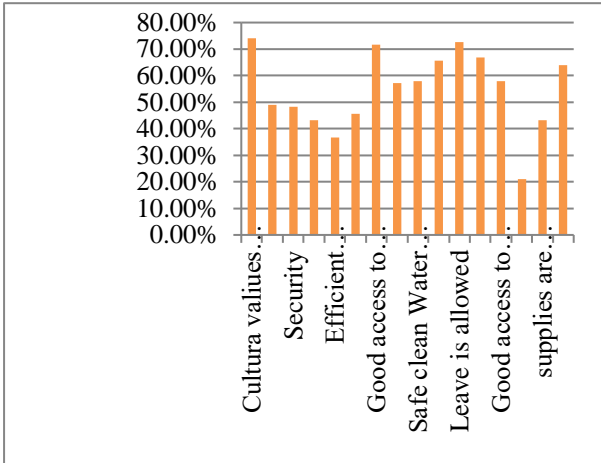


Figure 3: Work environment factors affecting motivation and retention.

Satisfaction factors

Out of respondents, 26.8% indicated they were dissatisfied with their jobs ($p = 0.163$). Only 11.1% of the respondents

felt that their supervisors did not provide support and encouragement ($p = 0.430$). With respect to receiving training required for the current position, 46.5% felt they had been provided this training ($p < 0.0001$).

The results in Table 2 shows a significant number interviewed were not sure of what was expected of them at work (1.6%, $p = 0.009$). However, morale levels were at (63%). However, respondents were less likely to encourage friends to seek care at their place of work (76.5%, $p = 0.0045$). Respondents were less likely to enjoy work (51.1%, $p = 0.0037$). This study was consistent with a study conducted in Zambia by Burgha, Kadzandira and Simbaya which concluded that employees do not receive training while at the work place.

Remuneration

Distribution of remuneration factors

Table 3 shows that among the respondents, 21.9% agreed that their salary package was fair ($p < 0.0001$). In terms of promotion opportunities, 35% felt there were sufficient opportunities for this ($p = 0.039$). While 39.5% felt there was no stagnation in their organizations, ($p = 0.016$).

Compensation factors

Compensation by region

Results shows that overall, among compensation factors considered very important, family health care was most reported (87.4%), then salary 83.6% and terminal benefits 79.3%. Recognition was least reported as being very important. Some of these results are portrayed in Figure 4.

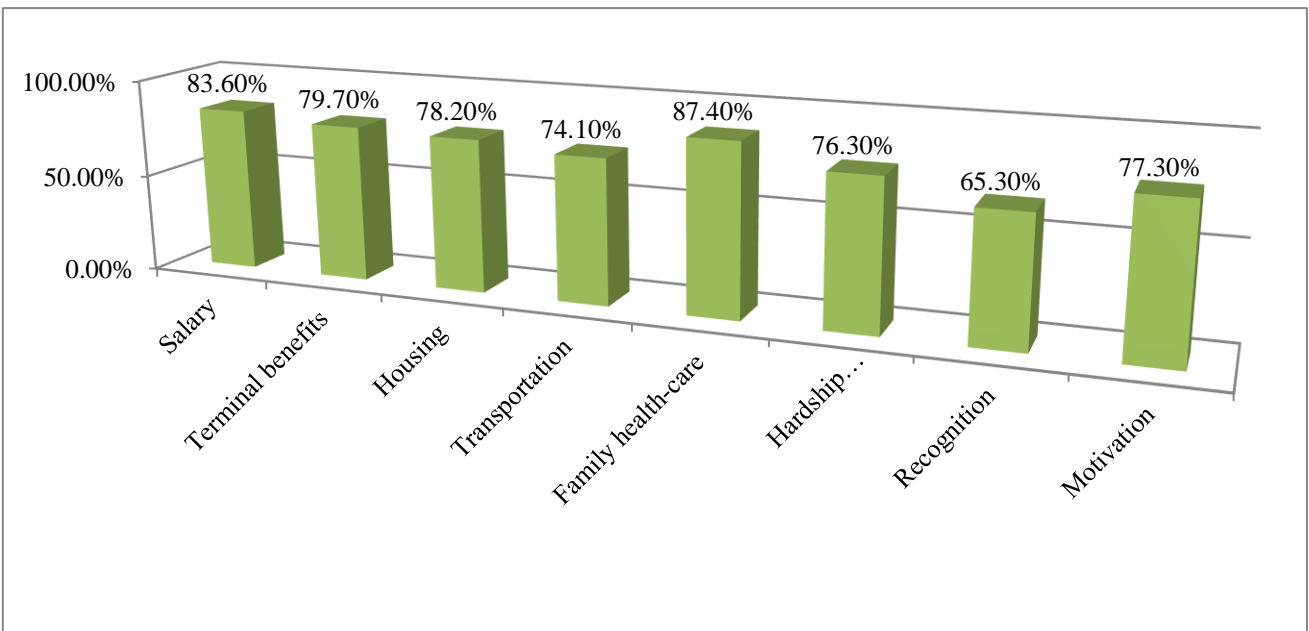


Figure 4: Importance of compensation factors.

Intention to leave in the future

Table 4 shows that overall, if given the opportunity, 66% of respondents indicated that they would leave their current job for a job in a different county, 67% would leave their current job to take up a job outside of a health facility while 72% would take up a job outside Kenya, $p < 0.0001$.

Factors affecting health worker motivation

Using Bivariate logistic regression, workload with an odds ratio of 5 (OR=5.062; CI=2.128-12.044) and Salary with Odds ratio of 13 (OR=13.492; CI=4.315-42.185) were the

two statistically significant factors that were found to affect job satisfaction which is a measure of motivation. The confidence intervals were however too wide to consider salary as statistically significant. Hence, a larger sample size may be required in subsequent studies.

Factors affecting health worker retention

The duration health workers would stay in their current employment was measured against several predictors using multinomial logistic regression. The factor that was of statistical significance was: Salary with p value of 0.008.

Table 1: Distribution of professional cadres of service providers by sub-county.

Type of Service provider	Kanduyi N=35%	Kimilili N=33%	Mt. Elgon N=33%	Tongaren N=33%	Kabuchai N=33%	Bumula N=33%	Sirisia N=33%	Webuye East N=33%	Webuye West N=33%	Total N=299 (%)
Registered nurse	17.1	18.2	24.2	27.3	15.5	21.6	27.3	15.3	18.2	20.5
Enrolled nurse	11.4	12.1	15.2	21.2	12.1	10.6	15.7	18.1	15.7	14.0
Lab technician	5.7	9.1	10.1	12.1	9.4	15.0	12.1	9.8	15.2	11.0
Clinical officer	14.3	18.2	11.1	9.1	6.1	15.1	6.3	17.4	18.5	12.0
Nutritionist	5.7	3.0	9.1	6.1	12.1	3.0	6.1	6.8	2.9	6.0
Medical officer	5.7	3.1	6.1	6.1	6.1	4.1	5.1	6.1	3.4	5.0
Counselors	2.9	6.1	0.0	0.0	3.9	3.4	3.3	3.7	0.0	2.5
Pharmacist	8.5	3.0	0.0	3.0	6.1	6.7	12.1	9.6	6.1	6.0
CHEW	5.7	1.0	0.0	6.1	9.0	6.1	12.1	6.4	7.8	6.0
Support staff	22.9	21.2	24.2	12.1	18.2	21.2	9.5	15.2	15.9	17.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 2: Satisfaction factors.

	Response	GoK N=299 (%)	P value
When I come to work, I know what is expected of me	Strongly disagree	0.5	0.009
	Disagree	1.1	
	Neutral	12.7	
	Agree	42.9	
	Strongly agree	42.9	
I find my work at this facility to be enjoyable	Strongly disagree	2.6	0.037
	Disagree	15.9	
	Neutral	30.2	
	Agree	34.9	
	Strongly agree	16.4	
I would encourage my friends and family to seek care here	Strongly disagree	4.2	0.045
	Disagree	6.6	
	Neutral	12.7	
	Agree	42.8	
	Strongly agree	33.7	

Table 3: Factors related to remuneration in Bungoma County.

Factors	Response	N=299 (%)
My salary package is fair	Strongly disagree	29.1
	Disagree	28.9
	Neutral	20.1
	Agree	16.9
	Strongly agree	5.0
There are sufficient opportunities for promotion	Strongly disagree	16.4
	Disagree	15.9
	Neutral	30.2
	Agree	34.9
	Strongly agree	16.4

Table 4: Intention to leave.

	Response	Total N=299 (%)	P value
Given the opportunity, would leave current job to take a job in a different district	Yes	66.3	<0.0001
	No	33.7	
Given the opportunity, would leave current job to take a job outside of health facility	Yes	66.9	0.001
	No	33.1	
Given the opportunity, would take a job outside of Kenya	Yes	72.3	0.965
	No	27.7	

Table 5: Summary of thematic issues emanating from FGDs in the County.

Summary	Kanduyi	Bumula	Tongaren
Positive issues about the current work environment	General satisfaction with salary, and job security	Positive response from patients	Good connections, relations with the community
Limitations	Discrimination in training, poor communication from superiors on job assignments; Tribalism.	Low/substandard housing, quality of accommodation.	Limited choices for education facilities for children of staff; language barrier especially for non- locals, unreliable transport to work and lack of electricity
Reasons for leaving job	Stagnation on current job, rivalry between different job cadres especially between clinical officers and nurses	Poor commuter allowance, huge workload; government bureaucracy (lack of commodities and other supplies)	Harsh geographical and climatic conditions
Retention: What would keep you in your job?	Regular training; good supervision	Better salaries, on-the- job training; more staff to support high workload	Hardship allowances; better accommodation and infrastructure.
Compensation factors	Increase allowances (medical, house, overtime and leave allowances)	Need to increase salaries and to pay salaries on time	Lack of NSSF and retirement benefits (for private facilities)
Gender issues at work	Increase duration of maternity leave	Not very vocal on gender issues, though a few muted voices of females felt that need to increase duration of maternity leave	Men require paternity leave
Cultural issues	Men control family planning and especially reproductive health issues sometimes to the detriment of women	A significant number of people believe in witchcraft and use herbs and charms to treat diseases	Women do not easily allow male nurses to attend to them; women are encouraged to give birth in standing position; new mothers do not breastfeed for a while if they give birth at night

Continued.

Summary	Kanduyi	Bumula	Tongaren
Organizational support	Multiple reporting lines and supervision make it difficult to coordinate work	In-charges are often significantly older than those they supervise and do not fully appreciate their younger colleagues	Staff are committed to work in hardship conditions

Table 6: Distribution of factors in leaving job in Bungoma County.

Distribution factors		N	Percentage (%)	P value
Low pay/salary/allowances	Not important	14	15.2	0.127
	Somewhat important	18	19.6	
	Very important	59	64.1	
High workload	Not important	27	31.4	0.122
	Somewhat important	22	25.6	
	Very important	37	43.0	
Poor access to supplies and equipment at work	Not important	26	30.2	0.905
	Somewhat important	28	32.6	
	Very important	32	37.2	
Limited opportunities for promotion	Not important	17	19.8	0.066
	Somewhat important	24	27.9	
	Very important	45	52.3	
Social conflicts in the workplace	Not important	44	51.2	0.997
	Somewhat important	17	19.8	
	Very important	25	29.1	
Insecurity within the surrounding community	Not important	18	41.9	0.024
	Somewhat important	11	25.6	
	Very important	14	32.6	
Poor supervision and management	Not important	40	47.1	0.423
	Somewhat important	18	21.2	
	Very important	27	31.8	
Transport problems	Not important	33	38.4	0.674

Insights from qualitative interviews

The results from the qualitative interviews elaborated in table 5 and 6 reveal the following aspects: (a) inadequate staff, transport, inadequate supportive supervision, essentials (gloves) contribute to dissatisfaction of HCWs; (b) lack of housing, payment of support staff, physical state of health facilities contribute to non-conducive environment for HCWs; (c) allowances (hardship, marriage, overtime), rest and recuperation are important; (d) gender balance in nursing staff, cultural issues critical.

DISCUSSION

Levels of drive and retention of medical personnel in Bungoma County settings

Satisfaction levels are considerably low among health workers in Bungoma County. This is attributed to inadequate staff, transport, inadequate supportive supervision; essentials (gloves) contribute to dissatisfaction. Allowances (hardship, marriage, and overtime), rest and recuperation are also important aspects of satisfaction. Just as in the Uganda workforce study, this study identified adequate training, job security, salary,

supervisor support and manageable workload as critical satisfaction factors.

Overall, 13% had changed jobs in the last 12 months before the survey and 20% indicated that they could leave their current job within two years. Attrition rates are highest in Kanduyi and Webuye East sub counties compared to Mt. Elegon. However, a higher proportion of health workers in Bungoma would leave the job for another county signifying lower level of satisfaction and poor working conditions.

This is similar to a study on motivation of health workers in Uganda in which 20% indicated that they could leave within three years.

To evaluate the effect of devolution on drive and retention factors of medical personnel in Bungoma County

More than 30% of health workers do not feel they have job security post devolution attributing to inadequate access to medical consumables, equipment and transport most critical in Bungoma, as expected. Lack of housing, payment of support staff, physical state of the health

facility contributes to non-conducive environment for health workers. A higher proportion of health workers in Bungoma feel their work load is not manageable. This could be related to the inadequate staff in Bungoma as observed in the findings. Working environment in the private facilities is rated higher than that in government facilities.

A smaller proportion of health workers in Bungoma feel they have adequate training for their jobs. This correlates with the findings on the low levels of education and upgrading opportunities noted in Bungoma. In the Uganda workforce study, health workers disclosed that training was a significant reward and motivator.

Education and gender factors were the lowest. There are more male health workers in Bungoma than females. Nationally, females are estimated to make up 50% of health workers compared to just 30% in Bungoma. This imbalance has cultural implications in the delivery of services.

Remuneration is a critical factor of motivation and retention. A higher proportion of health staff however feel their remuneration is not fair. This is highest number health staff complains of delayed payments as long as three months without payment which also records the highest attrition rate. Opportunities for promotion or career growth are key element of motivation which are not forthcoming in Bungoma County.

To crisscross the availability of policies/plans/regulations for drive and retention of Bungoma County health provider in public health facility and ministerial levels

The discoveries of this study reverberate well with the Kenya HRH vital arrangement, 2009-2012. In particular, they relate specifically to the second result- enhancing fascination and maintenance of wellbeing laborers. The two key destinations under this result are: (a) Making wellbeing division employments more alluring; and (b) Making hard to achieve stations more appealing.

Wellbeing division employments may not be right now extremely appealing, with the dominant part of wellbeing laborers wanting to be in the NGO area. This might be connected with working conditions in wellbeing offices, low fulfillment that incorporates lacking preparing and issues to do with compensation bundles. Difficult to-achieve ranges, for example, Bungoma are slightest alluring destinations to work in with the greater part of wellbeing staff showing want to work in various sub-districts.

The HRH key arrangement traces six techniques intended to enhance fascination and maintenance of wellbeing laborers. These are: lead intermittent audit of remuneration packagers; campaign for enhanced staff welfare; enhance work atmosphere; investigate choices for maintenance plans; survey and spread plans of administration; create and actualize maintenance bundles. The degree to which

these techniques are being or have been executed stays vague.

CONCLUSION

Health workers in Bungoma County have very low motivation and zeal as evidenced by late coming to work, numerous case of long waiting time and high in patient length of stay. There was high consultant turnover. Motivation and retention factors were no addressed comprehensively with a management team unaware of existence of such factors and their impacts on service delivery; as a result of this, the county is likely to lose at least 20% staffs in the next two years from resignation alone. The county is losing staffs to NGO's, private healthcare facilities and private business practice in search for better working environment and satisfaction.

The need to demonstrate that addressing HRH issues such as those related to the work environment and employee satisfaction works, and that indeed there are solutions. Unlike the current practice where the focus is on the increase in the number of service providers per population, the need to link increased investment in human resources for health to increased productivity and performance.

As more health service providers are recruited for each health facility, we should be able to see a corresponding improvement in health indicators in the catchment of the facility.

Recommendations

Conduct in-depth but rapid review of gender dynamics in the health care facilities in Bungoma County; develop and implement gender mainstreaming strategies in the facilities to address the health issues identified in this study and implement tailor-made training package and strategies for hard-to-reach areas like Bungoma to address training gaps identified in this study. Above all, develop comprehensive and equitable continuous training programmes for health workers in hard-to reach regions.

Address job satisfaction factors such as adequate staff numbers, supervision, basic equipment, working conditions such as medical supply, equipment, and housing in Bungoma County.

Empower decentralize HRH management system to at the county to address issues specific to county that is able to develop competitive compensation packages for health staff particularly in hard to reach areas to include family health care. These should be regularly reviewed to address changing needs. Additionally, develop strategies for career growth and promotion especially for higher cadre of health workers such as doctors.

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