
Job Motivation and Associated Factors Among Health Care Professionals Working in Public Health Facilities of Gedeo Zone, Southern Ethiopia

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To cite this article:

Nafkot Berhanu, Berhane Megerssa Ereso, Gebeyehu Tsega Nebeb. Job Motivation and Associated Factors Among Health Care Professionals Working in Public Health Facilities of Gedeo Zone, Southern Ethiopia. *Clinical Medicine Research*.

Vol. 6, No. 1, 2017, pp. 9-22. doi: 10.11648/j.cmr.20170601.12

Received: January 19, 2017; **Accepted:** January 31, 2017; **Published:** February 27, 2017

Abstract: Since the level of job motivation and associated factors among health care professionals in public health institutions in Gedeo Zone is not yet studied the objective of this study is to assess Level of job motivation and associated factors among health care professionals in public health institutions of the Zone. A cross-sectional study design was conducted in 36 health center of Gedeo zone, during February 20 to May 10, 2015. The data were analyzed using SPSS. Factor score was computed for the items identified to represent the level of job motivation. Using this regression factor score, multivariate linear regression analysis was performed. More than three quarter 77.4% (226) of the respondents were discourage from working hard for different reasons. only 57 (19.5%) of Health care professionals working in public health centers were highly motivated, only 6.2% (18) of them are rewarded for their hard working. Sex, communication, resource availability, inadequate salary, feedback, training, working environment, workload and recognition were negative determinates of job motivation. The motivation of Health professional in Gedo zone is low. Since half of the professionals were demotivated, healthcare organizations should maximize its effort to practice incentive schemes.

Keywords: Job Motivation, Health Care, Gedo Zone, Health Care Professionals

1. Introduction

Motivation is an internal psychological process. It is not possible to “motivate” people directly, only to create an environment conducive to high degrees of motivation. Further, motivation itself is not an observable phenomenon; it is only possible to observe either the results of the motivational process (such as improved performance) or perhaps, some of the determinants of motivation [1].

Increased motivation creates the conditions for a more effective workforce, but because work motivation is an interactive process between workers and their work environment, good management and supervision are still critical factors in reaching organizational goals. Motivation is crucial for organizations to function; without motivation employees will not put up their best and the organization’s performance would

be less efficient. Human resource management (HRM) systems in developing countries are weak and fragmented in the majority of health care organizations [1, 2, 3].

During the last decade a growing emphasis has been placed on the importance of motivated health workers in providing good quality health care. The 2006 World Health Report discussed at length the challenge of making the most of the existing health workers and it was stated that “developing capable, motivated and supported health workers is essential for overcoming bottlenecks to achieve national and global health goals” [4].

In 2008, the Kampala Declaration of the Global Health Workforce Alliance further emphasized the importance of motivated health workers in service delivery. WHO similarly has pointed out that “the ability of a country to meet its health goals depends largely on the knowledge, skills,

motivation and deployment of the people responsible for organizing and delivering health services”[5].

The increased focus on health workers’ motivation as vital to ensure good quality health services is a very important shift from seeing quality of service delivery in the health sector as a function of the number of health workers and their qualifications. This shift warrants a further discussion of motivation of health workers in low-income settings. A systematic review study of motivation in low-income countries concluded that “high quality care cannot be provided unless issues of de-motivated staff are comprehensively addressed” [6].

Health professionals are at the heart of any health system and a well-motivated workforce is a prerequisite for a functioning health system. The WHO report states that the issues around staff shortages, brain drain, low motivation and poor performance of human resource in Sub-Saharan Africa are so enormous that some termed it as ‘Africa health workforce crises’. In order to achieve the MDGs the region would require a 139% increase in health workers [7-12].

The African continent is currently facing serious human resource crisis in the health sector (9, 12). These severe human resource shortages have affected the ability of many countries to initiate and sustain credible health services. Although several reforms and policies have been developed to address health problems in the continent little attention has been given to required human resources and their motivation [9, 13 and 14].

The severely limited number of health professionals in sub-Saharan Africa negatively affects all types of health outcomes and threatens to limit the attainability of the Millennium Development Goals. The World Health Report is dedicated to recognizing and addressing these workforce shortages. The report identified a total of 57 countries that had a critical shortage of healthcare employees with a global deficit of 2.4 million doctors, nurses, and midwives [4].

Ethiopia has one of the greatest shortages with a density of only 0.03 physicians, 0.23 clinical nurses, and 0.02 midwives per 1,000 people in 2010. Several areas of human resources have been linked with barriers to achieving the Millennium Development Goals including low morale and motivation of health care workers, poor policies and practices for human resource development, and lack of supportive supervision for health workers [10, 11].

The Ethiopian Federal Ministry of Health has recently emphasized the need to produce and retain more health workers, and increased efforts to improve human resource management in public health institutions. Experts in human resource management recognize the significant relationship between poor staff motivation, particularly in low-income countries [15-16].

In Ethiopia, the mission of the public sector is to provide adequate health services to all segments of the population, has been eroded by decades of central planning, weak monetary incentives and poor accountability, leading to widespread opportunism on the part of public healthcare providers [17].

Identified de-motivating factors as, lack of incentives, poor inter-professional relations, poor communication system,

poor salaries, lack of promotions, unmet expectations, poor access to training opportunities, working conditions and inadequate facilities for performing expected duties, lack of concern by employers for staff welfare, lack of participation in decision-making, poor information flow to and from health management [18-19].

Lack of human resource management capacity in the public sector health institutions is one of the profound problems in Ethiopia. At the same time managing human resource management functions of health service institutions seems to be a neglected part, i.e. in most government health institutions of Ethiopia most of the human resource related activities are left for those who are not trained in managing human resource and also having other clinical responsibilities. This, in turn, results into mismanagement of the very scarce human resource in the health sector [3].

Overall, there is supportive policy environment (health policy and strategy, capacity building policy and strategy, civil service reform etc.) and a growing recognition at policy level that “Health is not only a byproduct of social changes but an instrument to promote such changes and health workers are in the vanguard”. However, most policy and strategy documents are dated (early 1990s) and there are no specific and newly updated policy and strategy documents on HRM [20].

Available data indicate that “health sector salaries seem more or less in line with the minimum cost-of-living increases and are favorable relative to other factors. “Base salaries of health personnel increased by at least 21% from 1999-2003 in nominal terms (40% in real terms)’ HR management is a dynamic process and there will be need to adjust to changing situations [21].

Motivation is one of the most important factors in affecting human behavior and performance. The level of motivation an individual or team exerted in their work task can affect all aspects of organizational performance. As mentioned by Project Management Institute (2008), the overall success of the organizational project depends on the project team’s commitment which is directly related to their level of motivation. As employees are the main resources for organizations’ business activities, the issues of employees’ motivation will critically decide organizations’ success. As a result, refer to Bourgault et al. (2008), organizations should obtain a clear understanding in employees’ dissimilarities in needs and preferences for motivation factors to boost up their performance towards overall organization goal [22].

“Low motivation has a negative impact on the performance of individual health workers, facilities and the health system as a whole. Moreover, it adds to the push factors for migration of health workers, both from rural areas to the cities and out of the country. It is therefore an important goal of human resources management in the health sector to strengthen the motivation of health workers...” [23].

So, this indicates that there is a gap in practicing motivational measures to employee complaining with the motivational theory in our country. In the study area what is practically seen is around 20% health centers there is drug supply shortage, water, electricity, housing, roads are

problems, there are also health care professionals who don't respect the working hours, in some health centers human resource management activities is done by health care professionals who have no clear ideas about HRM procedures, some health professionals simply sit while clients are in need of their helps, regarding the goal achievements there is gap per each health centers. If the strategy of motivation were followed in all institutions, there would be a chance to have motivated employee who is committed to achieve organizational goals. There for, the objective of this study is to assess the level of motivation and associated factors in Gedo Zone, southern Ethiopia.

2. Methods and Materials

The facility based cross-sectional study was conducted from February 25/2015 to March 5/2015 in Gedo zone, which is located in SNNPR at 360 km far from Addis Ababa in south direction and 89 km far from the regional city Hawassa in south East. The area of the zone is 25,640 Hectare and 1500-2380 feet above sea level. Total population in the zone is 1.1 million. It has *woyenadega* climatic condition and the average temperature of the zone is 22°C. It has annual rainfall of 1895 mm³. The zone has 8 Woredas (6 Woreda administration and 2 town administration), there are 36 health centers with 661 health professionals.

Randomly selected Senior Health care professionals working in public Health centers of Gedo zone at the time of data collection, Health centers heads and Human resource management facilitators/coordinators were the study population of the study. All categories of diploma nurses, BSC nurses, midwife nurses, midwife BSC, Health officers, Environmental health officers and laboratory technologist, pharmacist, druggist and laboratory technicians were the study participants of the study.

The sample size of the study was determined by single population proportion formula

Assuming, 5% marginal error and confidence interval of 95%. Fifty percent proportion has been preferred due to lack of similar studies in Ethiopia and to get maximum sample size, accordingly the sample size calculated to be 384. The final sample size calculated by using finite population correction formula since study population (N=661) is less than 10,000.

Adding non-response rate of 20%, total sample size of 243 + 49 = 292 health professionals were selected.

For In-depth interview (IDI) 10 senior health care professionals (those health care professionals work in the public health facility for 6 years and above), 8 heads of Health centers & 9 human resource management facilitators/coordinators were included.

A computer based simple random sample was used to select 292 participants from the source population. Job motivation was the outcome variable of the study while Socio demographic factors (age, sex, educational background, work experience, religion, ethnicity, marital status & educational status), communication (relationship between

management and staff), availability of basic medical supplies, salary, workload, training distribution and opportunity for education were the independent variables of our study.

Self-administered questionnaire was given to Health care professionals to fill their responses by data collectors while giving the questionnaire for the selected health care professionals they were told about the objectives of the study & appoint them when to return the questionnaire.

The tools and the concepts utilized for this study have been used in high-income countries and they were recently applied in African settings to measure health worker motivation. The tools were directly adapt from study done in Zambia to measure job motivation of health worker in public health facilities because of there is no available tools that has been used in Ethiopia previously [43].

Pre-tested and structured questionnaire was adapted from similar study done in Zambia. The questionnaire was prepared in English; translated in to Amharic and administered in English and Amharic because of at least all of the health care professionals knows English and Amharic. The questionnaire was designed to obtain information on; socio demographic characteristics of respondents, factor affecting motivation & assessing level of motivation. The questionnaire consisted of five points Likert scale items, with 1 and 5 indicating the lowest and highest levels agreement, respectively. The response categories for Likert scale items should have five categories to maximize variation. Each of the responses was scored: strongly disagree=1, disagree=2, undecided/not sure=3, agree=4, strongly disagree=5. After reversed for negatively worded items to positively worded items, score was summed for each respective factor.

The 23 items that contain 7 constructs with Likert scale (1 strongly agree to 5 strongly disagree), after reversing negative worded items 292 data were subjected to principal component analysis (PCA) using SPSS Version 20. At the point assumption come across 14 items remained in 3 component with Kaiser Meyer-Okin (KMO) value 0.888, Bartlett's Test of Sphericity was less than 0.001, Communalities for all items were above 0.5, 3 components with eigenvalues exceeding 1, explain 64.193% of the variance with internal reliability (Cronbachs' alpha) estimates of 0.601 the data were used for further analysis.

The self-administered questionnaire is distributed and collected by 16 trained diploma graduate nurse who were excluded from the study due to their service year and unselected for self-administered questionnaire. The nurses were trained for one day by the principal investigator on the study instrument, study objective, consent form, how to distribute the questionnaire and collect it. The individual depth interview was conducted by principal investigator; one Health officer was recruited and participated by note taking.

Before the actual data collection, the quantitative questionnaire was pre-tested on 5% (14) of the total sample size outside the study area in Sedama zone 'Qebado' Health center. The purpose of the pre-testing is check clarity of the instructions, any questions were unclear or ambiguous,

whether there were any major topic omissions, ensure that the respondents were able to understand the questions, to check the wording, logic and any other comment. Two (2) questions were clarified after pre-testing.

After data collection, each questionnaire was checked for completeness and code was given before data entry. Data was entered, cleaned, explored for outliers, missed values, missed variables and edited by using EPIDATA V.3.2. Different frequency tables, graphs and descriptive summaries were used to describe the study variables. Correlation between dependent and independent variables was checked by using binary and multivariate linear regression. On binary linear regression a p-value ≤ 0.25 was used as a candidate for multivariate linear regression analysis. Statistical significant correlation was tested at a p-value of < 0.05 . Finally only those independent variables that maintain their association with outcome variables in multiple linear regressions were used to construct the final models. To level job motivation principal component analysis was used. Variables with correlations greater than 0.30 and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy greater than 0.5 support variables retention in analysis. Each variables with communality < 0.5 was removed from analysis and Variables with complex structure having high loadings or correlations ≥ 0.40 on more than one component were removed from analysis. Then appropriate number of factors was determined. The components explain at least 50% of the variance in each of the variables was included in the final analysis. The communalities for all of the variables was included on the components were greater than 0.50 and all variables have simple structure. After identifying the components the mean of factor analysis component (FAC) for further analysis, items in the final component taken to calculate percentage scale score of job motivation for each individual, then after level of job motivation into quantized it to low motivation, medium motivation and high motivation.

To assure the data quality, data collection tool were adapted from similar study for quantitative study, for qualitative part from different studies and modified according to the local context and objectives of this study by the principal investigator. Initially the questionnaire was prepared in English language then translated to Amharic; national language of Ethiopia. Back translated to English to ensure semantic equivalence. Training was given to data collectors and supervisors by the investigator. Pre-testing of the questionnaire was carried on health care professionals

that could not be included in the study, based on the result necessary modification was followed.

At the end of each day, the questionnaire was checked for completeness, accuracy and consistency by the supervisor and data collectors and again rechecked by principal investigator before entered in to EpiData corrective discussion was under taken with all the data collectors and supervisors. Finally Data were cleaned and edited by using EPIDATA V.3.2.

Ethical clearance was obtained from ethical committee of Jimma University, College of Public Health and Medical Science. Permission letter was obtained from SNNPR Regional Health bureau and Gedeo zone Health Department after discussion of the purpose of the study. Similarly after clear discussion about the actual study written informed consent was obtained from each study participates while the study participants right to refuse was also be respected. Different measures were taken to assure the confidentiality of study participant's such as writing their names or any identification in the questionnaire was not be required.

The final result of this study will be presented to Jimma University, College of Health science, disseminated to Regional health bureau, zonal health department and Health centers involved in the study and also communicated to Ministry of health. Further attempt will be made to publish it on national scientific journals.

3. Results

A total of 292 self-administered questionnaires were distributed to health professionals working in public health centers found in Gedeo zone. All questionnaires were returned, giving a response rate of 100%. All were complete and has no inconsistencies so that 292 data were found to be useful for analysis.

From study participants 56.2% (164) of the respondents were male, the average age of the respondents was 28.69 (SD 6.25), ranging from 20 years to 50 years. Slightly above half participants were Gedeo in ethnicity followed by Amhara, 44.2 (129) of them were orthodox religion followers, around half were unmarried, all type of health care professionals accounts 74% (217) which includes clinical nurse, midwifery nurse, public health nurse, Health informatics and sanitarian nurse. The average salary for health care professionals working in public health centers of Gedeo zone is 2,580 (SD 1127) ETB, ranging from 1663 to 7424 per month (Table 1)

Table 1. Socio demographic characteristics of Health Care Professionals working in Public Health Facilities of Gedeo zone, southern Ethiopia, 2015.

No	Socio Demographic characteristics	Frequency	Percent	
1	sex	Male	164	56.2
		Female	128	43.8
2	age	Below 30 yrs.	218	74.7
		Above 30 yrs.	74	25.3
3	Ethnicity	Gedeo	153	52.3
		Oromo	36	12.3
		Amhara	41	14
		Gurage	33	11.3
		Tigre	20	6.8
		*Others	9	3.1

No	Socio Demographic characteristics	Frequency	Percent
4	Religion	Orthodox	44.2
		Protestant	40.8
		Muslim	8.9
		Catholic	3.4
		Others	2.7
5	Marital status	Single	51.7
		Married	46.6
		Divorced	1
		Widowed	0.7
6	Experience in health sector	Below 5 years	67.1
		Between 6 and 10 yrs.	24.7
		Above 10 yrs.	8.2
7	Educational status	Diploma	82.2
		Degree	17.8
		All type of nurses	74.3
		BSc Nurses	4.8
		HO	9.6
8	Professional background	Lab Technicians	3.8
		Lab Technology	1.4
		Pharmacy Technicians	4.1
		Pharmacy Technology	1
		Enva HO	1
		1663 ETB (83.15 USD)	22.6
		1664-3000 ETB	52.1
9	Salary	Above 3001ETB	25.3

*Others, Konso, Sidama, Wolyita

There are different factors which could influence motivation of health care professionals working in public health centers in Gedeo zone. Of the respondents 90.4% (264) were know their job duties, requirements, and the goals are clear and specific, while 9.6% (28) of the respondents were not (Table 2).

Of the respondents, only 15.8% (46) believes that their job provides with opportunities for advancement to higher levels jobs, while 84.2% (246) disagreed. Of the respondents, 52% (152) complain that they don't get any feedback from their managers or supervisors regarding their job within the last 3 months, while 48% (140) get feedback (Table 2).

A 36 years old male Health Care Professional from one HC said:

"...in my experience I never seen while my supervisors or managers gave me feedback regarding my work, even they don't supervise the work done"

Among the respondents concerning communication relationships 50.3% (147) were very satisfied, 27.4% (80) satisfied, 11.3% (33) not satisfied and 11% (32) comments it needs improvement (Table 2).

One of human resource expertise, sex male, age 32, from Yirga cheffe town HC said,

"... Staff communication is smooth, sometimes we heard conflict and then immediately the discipline committee call those who disagreed and arbitrate the conflict among or between them"

Around One fourth of the respondents, happy by the tasks they performed 26% (76), while 74% (216) complain there were workload (Table 2).

A 28 years old Female Health Care Professional from one HC said:

"... We received more than 30 lab requests from all department of the health center which is above the average

per day than recommended by WHO, sometimes we might report false positive results"

Most respondents 94.9% (277) are not satisfied with present remuneration or salary/compensation, while only 5.1% (15) of them are satisfied. Slightly above half of the respondents 52.1% (152) feel that there are shortage of medical supplies needed for their work (Table 2).

A 30 years old male Health Care Professional from one HC said:

"... I am diploma graduate I worked in this health center for the past 10 years even my salary increased by two fold that it were in the last five year, now a day things are changed, my salary can't goes me through a month (finished before a month)..."

The issues of feedback, communication, workload, salary/compensation and medical supplies influence or affects job motivation of health care professionals working in public health centers of Gedeo zone (Table 2).

Above half 60% (174) complain that training is not given equally for them, 64.4% (188) of them also complain that there is no clear path to continue further education, half of the respondents not enjoy their work environment (Table 2).

A 25 years old male Health Care Professional from one HC said:

"... What irritate me is that the issue of training and continuing education, those who has social tie with heads of health sector, and those who are best friends of them used the chance most..."

A 29 years old male Health Care Professional from one HC said:

"...Most of the time opportunity for education is given for BSC graduates this thing upset diploma graduates, they start learning by themselves in private collages education..."

A 27 years old male Health Care Professional from one HC said

"There is a problem with staff motivation. You work for five or more years in the same place. You find the same person goes to the same training in two years; why not rotate and train someone else the next year?"

As many as 94% (274) were not rewarded for their hard working but only 6% (18) got reward for their hard working from their employee. Among those who got reward 0.7% (2) are promoted, 0.3% (1) got salary increment and 5.9% (17) given merit/bonus (Table 2).

Table 2. Showing Different characteristics that exist in public health centers of Gedeo zone, southern Ethiopia, 2015.

Variables	Options	Count	Percent
Guideline administration	Yes	264	90.4
	No	28	9.6
Opportunities for advancement levels of job	Yes	46	16
	No	246	84
Feedback	Yes	140	47.9
	No	152	52.1
Communication	Very satisfied	147	50.3
	satisfied	80	27.4
	Not satisfied	33	11.3
	Need improvement	32	11
Workload	Happy	76	26
	Overworked	216	74
Remuneration or salary/compensation	Yes	46	15.8
	No	246	84.2
Resource availability	Yes	140	47.9
	No	152	52.1
Training	Yes	118	40.4
	No	174	59.6
	Yes	48	16.4
Career development/continuing education	No	188	64.4
	don't know	56	19.2
	Yes	146	50
Working environmental	no	146	50
	Strongly agree	38	13
	Agree	99	34
Efforts	Not sure	82	28
	Disagree	73	25
	Yes	18	6.2
Reward	No	274	93.8
	Yes	2	0.7
Promotion	No	16	5.5
	Yes	1	0.3
Salary increment	No	17	5.9
	Yes	17	5.9
Bonus/Merit	No	1	0.3
	Yes	226	77.4
Assistance	No	66	22.6

Out of 292 respondents, 74.4% (226) are discouraged from working hard for their health center due to reasons presented in fig. 1 below.

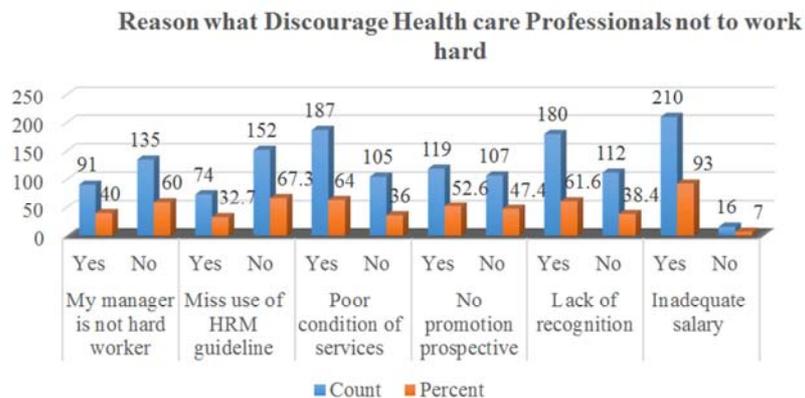


Figure 1. Showing reasons discouraging Health Care Professionals not to work hard in public health centers of Gedeo zone.

From the respondents above half of them 160 (54.8%) consider themselves as motivated to work hard, 132 (45.2%) are not motivated to work hard for the health center they are working for (Figure 2).

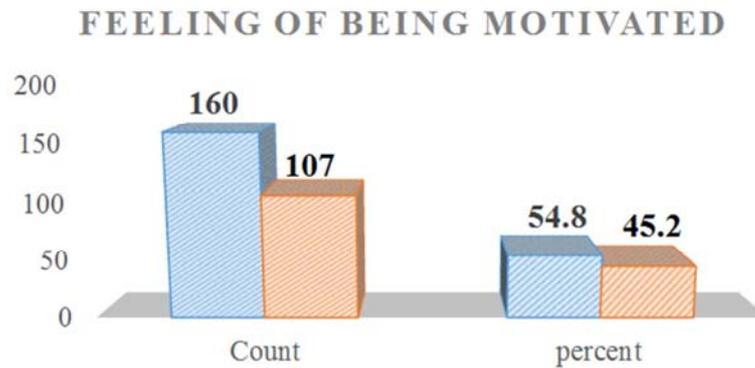


Figure 2. Showing response of health care professionals working in public health center of Gedeo zone about their feeling of motivation to work hard.

Job motivation

After PCA was done the reduced items 14 out of 23 items used to assess the level of motivation and for further data analysis, all the 14 questions taken together as a single index of motivation after calculating the mean of 3 components formed out of 7 constructs (initially) (Table 3).

Table 3. Motivational outcome constructs and questions of health Care professionals working in public health centers of Gedeo zone, southern Ethiopia, 2015.

Constructs	Descriptive Statistics			
	Remained Items after data reduction	Mean	Std. Deviation	Analysis N
General motivation	Only I do this job to get paid	3.93*	1.030	292
	I am often absent form work	3.20	1.123	292
	I feel emotionally drained at the end of every day	3.40*	1.137	292
	Sometimes when I get up in the morning, I fear having to face another day a	3.55*	1.161	292
	It is not a problem if I sometimes come late for work	3.46*	1.176	292
	I am not satisfied with my colleagues in my work	3.28	1.333	292
	I do this job as it provides long-term security for me	3.58*	1.328	292
	I feel very little commitment to this health center	2.89	1.331	292
Carefulness	I do not think that my work in this health facility is valuable these days	2.84	1.233	292
	I always complete my tasks efficiently and correctly	3.37	1.313	292
	Do things that need doing without being asked or told	1.79	.896	292
Organizational commitment	I am punctual about coming to work	1.89	.903	292
	I am proud to be working for this health center	4.46*	.747	292
	I am glad that I work for this center rather than other facilities in the country	4.20*	.917	292

Sign (*) indicate the scale for negatively worded questions was 1 (strongly disagree) to 5 (strongly agree). Thus a high score shows disagreement with a negative statement (Table 3).

Under general motivation constructs 8 items were loaded, 12(4.1%) strongly agreed, 25 (8.6%) agreed, 18(6.2%) neutral, 153(52.4%) disagree and 84(28.8%) were strongly disagreed towards they only serve to be paid (Table 4).

Among the respondents respectively 23 (7.9%) strongly agree, 43 (14.7%) agree, 57 (19.5%) neutral, 116 (39.7%) disagree and 53 (18.2%) strongly disagree that they are not satisfied by their colleague, around one fourth of the health care professional's fears when they get up in morning to face another day of work (Table 4).

A 32 year old Female Health Care Professional from one HC said:

"... Some of my colleagues not give services expected from them, for simple thing they might appoint the clients or refuse to give services, for e.g. while family planning

consumables is in store let them for other days, some health care professionals take chair outside (for unfruitful talk) while clients knocking their door for services..."

Concerning carefulness construct 82.5% of the respondents agreed that they complete their task correctly and efficiently, around 8% they wait told to do so from their boss (Table 4).

Almost half of the respondents not like the current health center they are working in, 44.2% of the respondents proud to work for the health center currently working in (Table 4).

A 35 years old male Health Care Professional from one HC said:

"... No one recognize your work, even you perform valuable activities".

Table 4. Description of variables that measures level of job motivation among health care professionals working in public health facilities of Gedeo zone, southern Ethiopia, 2015.

Constructs	Items	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
General commitment	Only I do this job to get paid	12 (4.1%)	25 (8.6%)	18 (6.2%)	153 (52.4%)	84 (28.8%)
	I do this job as it provides long-term security for me	27 (9.2%)	52 (17.8%)	75 (25.7%)	111 (38%)	27 (9.2%)
	I feel emotionally drained at the end of every day	20 (6.8%)	54 (18.5%)	46 (15.8%)	133 (45.5%)	39 (13.4%)
	Sometimes when I get up in the morning, I fear having to face another day a	18(6.2%)	51(17.5%)	31(10.6%)	137(46.9%)	55(18.8%)
	I am not satisfied with my colleagues in my work	23 (7.9%)	43 (14.7%)	57(19.5%)	116(39.7%)	53(18.2%)
	I feel very little commitment to this health center	31(10.68%)	41(14%)	25(8.6%)	124(42.5%)	71(24.3%)
	It is not a problem if I sometimes come late for work	3 (1%)	22(7.5)	15(5.1)	126(43.2%)	126(43.2%)
	I do not think that my work in this health facility is valuable these days	34(11.6%)	37(12.7%)	28(9.6%)	111(38%)	82(28.1%)
	I am often absent from work	4(1.4%)	6(2.1%)	3(1%)	117(40.1%)	162(55.5%)
Carefulness	I always complete my tasks efficiently and correctly	130(44.5%)	111(38%)	36(12.3%)	11(3.8%)	4(1.4%)
	Do things that need doing without being asked or told	133(45.5%)	120(41.1%)	16(5.5%)	20(6.8%)	3(1%)
	I am punctual about coming to work	89(30.5%)	126(43.2%)	48(16.4%)	22(7.5%)	7(2.4%)
General commitment	I am proud to be working for this health center	49(16.8%)	80(27.4%)	64(21.9%)	51(17.5%)	48(16.4%)
	I am glad that I work for this center rather than other facilities in the country	39(13.4%)	32(11%)	72(24.7%)	81(27.2%)	68(23.3%)

PCA revealed the presence of 3 components with eigenvalues exceeding 1, explaining 64.193% of total variance. Each component contribute respectively 41.848%, 13.084% and 9.625%. The internal reliability estimates in this sample (Cronbachs alpha) of 0.601.

Table 5. Reliability of instruments for measuring level of job motivation constructs, Gedeo zone public health centers.

Rotated Component Matrix ^a	Component		
	General motivation	Carefulness	Organizational commitment
Only I do this job to get paid	.879		
I am often absent form work	.864		
I feel emotionally drained at the end of every day	.823		
Sometimes when I get up in the morning, I fear having to face another day a	.819		
It is not a problem if I sometimes come late for work	.785		
I am not satisfied with my colleagues in my work	.763		
I do this job as it provides long-term security for me	.733		
I feel very little commitment to this health center	.707		
I do not think that my work in this health facility is valuable these days	.693		
I always complete my tasks efficiently and correctly		.775	
Do things that need doing without being asked or told		.769	
I am punctual about coming to work		.735	
I am proud to be working for this health center			.848
I am glad that I work for this center rather than other facilities in the country			.835

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 4 iterations.

After data reduction in to 14 items to determine level of job motivation the following formula (Equation 2) used [52]. Percentage scale score is calculated for each participants of the study.

$$Percentage\ Scale\ Score = \left(\frac{Actual\ mean\ score - Potential\ Minimum}{Potential\ Maximum - Potential\ Minimum} \right) * 100\% \quad (1)$$

The 14 items each has 5 point Likert scale, potential Minimum score will be 14 since the minimum score for

Likert scale is one, potential maximum will be 70 (fourteen time the highest score five; $14 \times 5 = 70$). The actual mean score is calculated for each 292 health care professionals participated in the study it falls in range between 20.43 and 80.36, then after by substituting the values of actual mean score, potential minimum and maximum percentage scale score for level of motivation is calculated afterward, the

resulting percentage mean score is quantized to show the level of job motivation, accordingly 61 (20.9%) health care professionals has low motivation, 174 (59.6%) medium motivation and 57 (19.5%) were highly motivated. The box plot for level of motivation is presented just under here, the numbers around the 25th quintile shows minimum values contributed by the corresponding respondents.

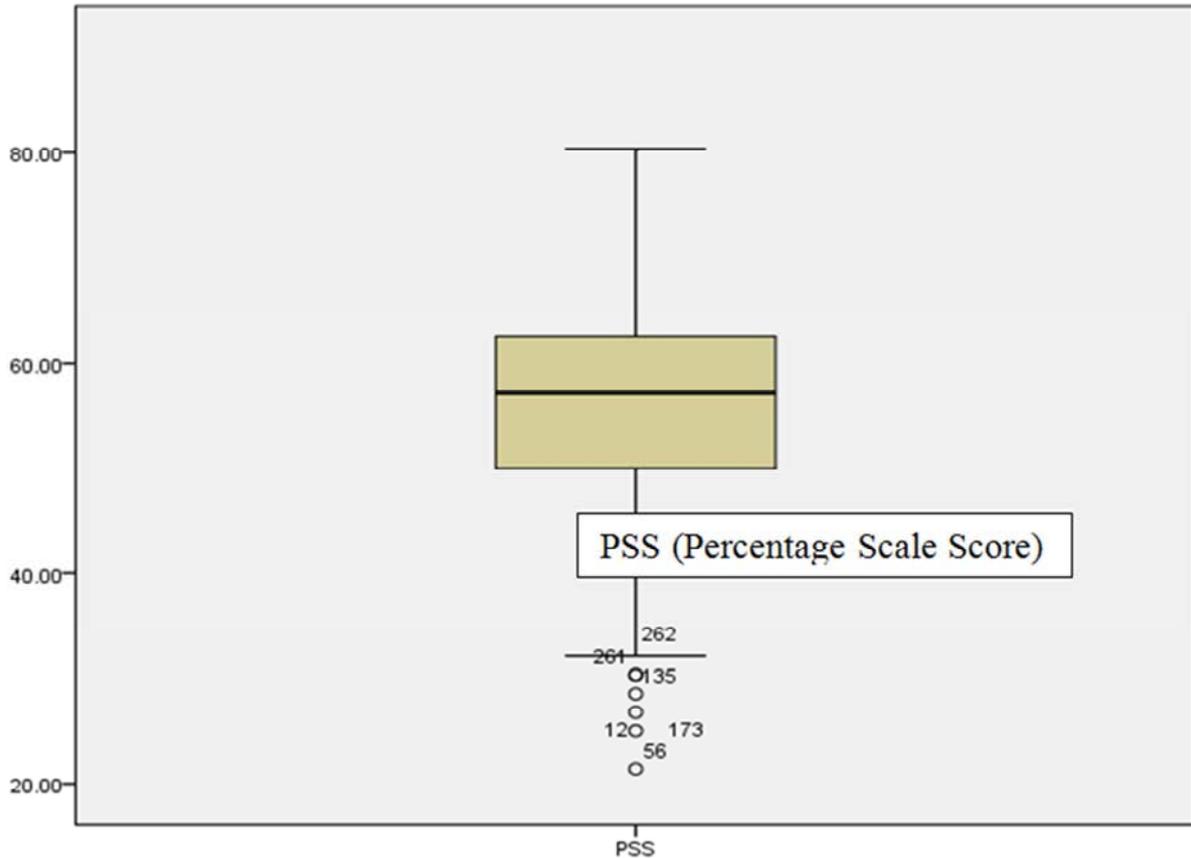


Figure 3. Box plot showing level of job motivation among health care professionals working in public health facilities of Gedeo zone, Southern Ethiopia, 2015.

Association of different Factors that affect job motivation of health care professionals working in public health facilities of Gedeo zone, southern Ethiopia.

The bivariate analysis revealed that socio-demographic characteristics such as sex, age and work experience were significantly associated with level of job motivation among health care professionals working in public health facilities (Table 6).

Table 6. Showing simple linear regression of socio demographic characteristics association with job motivation among health care professionals working in public health facilities of Gedeo zone, southern Ethiopia.

Socio demographic characteristics	No (%)	p-value	Unstandardized β coefficient	95% CI for β
Sex	Male*	164 (56.2)		
	Female	128 (43.8)	0.001	-0.162 (-0.25, -0.069)
Age		0.018	0.009	(0.002, 0.017)
Work experience		0.014	0.016	(0.003, 0.026)

Sign (*) used to indicate reference group with high frequency

From factor influencing job motivation in bivariate linear regression, feedback/supervision, effort, workload, opportunity for advanced level of jobs, resource availability, training, chance for education or career development,

communication, work environment, lack of recognition/appreciation for work done, head of health center, miss use of HRM guideline, poor condition of service, inadequate salary and absence of promotion

prospective were candidate for multiple linear regression analysis (Table 7).

Table 7. Showing simple linear logistic regression of factor influencing job motivation of health professionals working in public health facilities of Gedeo zone, southern Ethiopia.

Variables	No (%)	P-value	Unstandardized β coefficient	95% CI for β
Feedback/ supervision	Yes	140 (47.9)	0.056	0.098
	No*	152 (52.1)		
Effort	Strongly agree*	38 (13)	0.800	-0.15
	Agree	99 (34)		
	Not sure	82 (28)		
	Disagree	73 (25)		
Workload	Yes	76 (26)	0.001	-0.175
	No*	216 (74)		
Resource availability	Yes	140 (47.9)	0.000	-0.197
	No*	152 (52.1)		
Opportunity for advancement	Yes	46 (15.8)	0.019	-0.154
	No*	238 (81.5)		
Training	I don't know	8 (2.7)	0.001	-0.312
	Yes	118 (40.4)		
Education opportunity	No*	174 (59.6)	0.031	-0.131
	Yes	56 (19.2)		
Working environment	No*	236 (80.8)	0.001	-0.251
	Yes	146 (50)		
Communication	No*	146 (50)	0.516	0.036
	Very satisfied	38 (13)		
	Satisfied*	99 (34)		
	Not satisfied	82 (28)		
Lack of recognition	Need improvement	73 (11)	0.518	-0.31
	Yes*	226 (77.4)		
Head of health center	No	66 (22.6)	0.001	-0.215
	Yes	91 (31.2)		
Miss use of HRM Guideline	No*	135 (46.2)	0.097	-0.079
	Yes	74 (25.3)		
Poor condition of services	No*	152 (52.1)	0.037	0.114
	Yes	187*		
Inadequate salary	No	105	0.192	-0.065
	Yes*	210 (71.9)		
No Promotion prospective	No	16 (5.5)	0.118	-0.164
	Yes*	119 (40.8)		
	No	107 (36.6)		0.140
				0.045, 0.234

The final regression model shows that except work experience the rest variables were negative predictors of job motivation. All of the variables were strong predictors of job motivation with ($p < 0.01$) but lack of recognition/appreciation predict the job motivation with ($p < 0.05$) (Table 8).

Female health care providers had an average of 0.213 unit lower job motivation score when compared with their counterpart (95% CI -0.256 to -0.094) (Table 8).

As work experience increase by one year the job motivation scale increase by 0.134 unit with 95% CI (0.004 to 0.024) (Table 8).

Health care providers who complain the working environment is not good their motivation is lower by 0.211 unit than those who works in good environment (Table 8).

Those health care professionals who are not satisfied by communication between management and staff their motivation score decline by 0.127 than those satisfied by the

communication (Table 8).

If health care providers were not recognized/appreciated by their immediate supervisor or manager their motivation score decrease by 0.111 unit than those got recognition from manager or clients (Table 8).

A 34 years old male Health Care Professional from one HC said:

“Most of the time appreciation comes from patients which is most important, because it is sincere and heartfelt, it is more than money, we can't compare it with money”.

If Health care providers were not supervised or given feedback on their job their job motivation score fall by 0.116 unit than those who get feedback from their Boss (Table 8).

A 31 years old Female Health Care Professional from one HC said:

“... First of all the supervision/feedback is low in frequency and irregular, at the time of supervision they remind you of the rules and control you, while individual

efforts go unnoticed, mistakes or shortcomings are noticed immediately..."

Those health care providers who complain that their salary is inadequate their job motivation score is lower by 0.136 unit than those health care professionals considering their salary is enough with 95% CI (-0.422 to -0.066) (Table 8).

A 35 years old Male Health Care Professional from one HC said:

"... We are living in a hard condition: salary itself can never sustain even food for the whole month, not to talk about other issues, even the part time pay is not in line with pay in other regions of the country, we are paid 41per a duty..."

Those health care professionals not getting equal chance for training than their counterpart their job motivation score is lower by 0.35 unit.

A 32 years old male Health Care Professional from one HC said:

"... It is necessary to make everybody participate in training opportunities, not always to privilege the same..."

Those health care professionals who are working in area with less medical supplies (resource availability) their job motivation scale score were lower by 0.170 unit than those who works with enough materials (95% CI -0.221 to -0.056) (Table 8).

A 45 years old male Human resource management coordinator from one HC said:

"... Now a day governmental health care institutions are becoming weak, they are not providing expected services for the community, most of the time drugs were not available, even for simple lab investigation they sent clients to private clinics..."

Table 8. Showing determinants of job motivation among health care professionals working in public health facilities of Gedeo zone, southern Ethiopia.

Variables	No (%)	Unstandardized β coefficient	Standardized β coefficient	95% CI for β
(Constant)		0.398		(0.283, 0.512)
Sex	Male*	164 (56.2)		
	Female	128 (43.8)	-0.213***	(-0.256, -0.094)
Work experience		.041	0.134***	(0.004, 0.024)
Working Environment	Yes*	146 (50)		
	No	146 (50)	-0.211***	(-0.254, -0.091)
Communication	Very satisfied	147 (50.3)		
	Satisfied*	80 (27.4)		
	Not satisfied	33 (11.3)		
	Need improvement	32 (11)	-0.166	-0.293, 0.039
Lack of recognition	Yes*	180 (61.6)		
	No	112 (38.4)	-0.108	(-0.218, 0.001)
Feedback/supervision	Yes	91 (31.2)	-0.102	(-0.199, -0.005)
	No*	135 (46.2)		
Inadequate salary	Yes*	210 (71.9)		
	No	16 (5.5)	-0.243	(-0.420, -0.066)
Training	Yes*	160 (54.8)		
	No	132 (45.2)	-0.269	(-0.353, -0.185)
Resource availability	Yes	140 (47.9)	-0.138	(-0.221, -0.056)
	No*	152 (52.1)		

(*): reference category, (**) Significant at 0.05, (***) significant at < 0.001

NB:-Negative values of both unstandardized and standardized β show that the corresponding factors are the negative predictors for Job Motivation, whereas the positive values indicate that the factors are positive predictors.

Among Health care professionals working in public health center of Gedeo zone 37 (22.6%) male and 24 (18.8%) female had low job motivation, 98 (59.8%) male and 76 (59.4%) female had medium job motivation and 29 (17.7%) male and 28 (21.9%) females had higher job motivation.

4. Discussion

Job motivation plays an important role in contributing to positive consequences to the quality of the institutions especially in health care organizations. Therefore, the results presented here are crucial, in sum, the main objective to be attained is to determine level of job motivation and

associated factors in public health centers. Results from this research indicated that sex, work experience, working environment, feedback/supervision, Resource availability, communication, inadequate salary, training distribution and lack of recognition for the work done in public health centers were the main determinant of job motivation.

It is evident from the study that 26% (76) of health care professionals are complain work overload this agrees with findings from South Africa and Northern Viet Nam [38, 42-43]. The similarity is might be due to health care services are labour intensive by its nature and also might be lack of resource to employee adequate health care professionals.

In this study around 84.6% of health care professionals have no clear ideas regarding continuing education, this figure is nearer similar with study done in developing countries (Africa and Asia) which is 80%, to provide health care services 47.9% of health care professionals face

shortage of basic resource supplies (medical equipment and supplies) which is clearly shown in study done in developing countries [44]. This is might be due to lack of awareness on educational curriculum of the country and for shortage of medical equipment and supplies the similarity is might be due to poor management system of stock or lack of budget (resource) to purchase.

A 31 years old Female Health Care Professional from one HC said:

“... why I am here is to serve the community by providing expected health services from me... even though this health center is serving for more than 30,000 population it lacks even basic equipment for example BP-apparatus, which is cheap to buy...”

The result indicate that 95% of professionals feel that the salary is not compensator, opportunity for advancement is only 15.8%, 90.7% of health care professionals not recognized for their performance and only 6.2% of them are rewarded this finding is in line with study done in Rwanda, motivation of health care workers are closely related to the presence of opportunities for promotion, salary increases, working conditions and supervision [45]. This is might be due to financial inflation all over the world, rewarding mechanisms is not cultured in in health sectors of those countries.

Communication relationship among management and staff lower job motivation score by 0.127 units, similarly lack of recognition and poor working environment respectively lower 0.111 and 0.211 units of job motivation score this finding is similar with study done on the motivation of health sector workers in Mali, on 370 health workers identified motivating factors such as salary/compensation, receiving training, appreciation and receiving recognition, receiving promotion, receiving incentives, working within a team spirit [41].

This study revealed that there is association of sex with level of job motivation, study done in Addis Abeba, does not show significance difference in work motivation based on gender again study done in Zambia shows females were more motivated than males but this study shows that there is difference among male and female [43,50]. There is no apparent explanation why not female health care professionals were less motivated with their job. Possibly Maybe perception of affirmative action since most of them work in rural health centers and also might male consider the phenomena are fair; considering resource constraint and week management system of health sector, the issue of gender needs further investigation.

A 34 years old male Health Care Professional from one HC said:

“... confidently I can say, the salary is very low especially paid for diploma graduate, the government is not providing us transport service daily we are paying 14 ETB for taxi, there is unfair promotions and transfer procedures, it is fevered for those who has money and social ties, there is “drought of equipment’s and supplies”, almost all staff rent houses since the health center is far from Woreda towns

which is also covered by our salary... all this thing affect my motivation” this is similar with a study done in Ghana on health worker motivation in the public sector revealed low salary, lack of essential equipment, supplies, delayed/unfair promotions, personal means of transport, inadequate in-servicing training, official transport for work, inconvenient or unfair transfer procedures as been factors affecting motivation of health workers [47]. This is might be due to poor management of health system and lack of resource to fulfill the existing gaps.

This study revealed factors such as opportunity for training, relation among with colleagues, working environment, basic medical equipment and supplies as motivating factors this is also true with study done in Indian two state [35]. This is due to Herzberg theory of motivation; the theory consider the mentioned factors as hygienic (extrinsic) factors which affects motivation so this both study is in line with the theories of two factors of Herzberg.

If Feedback is not given by manager or supervisor for health care professionals their job motivation score decline by 0.116 unit motivated, unavailability of tools and materials to work with lower by 0.170 units of job motivation score which is similar with study done in north-eastern Nigeria [38]. This is might be due to the health centers managers or supervisors were not using feedbacks and supervision as tools for performance evaluation, quality management and initiate tools for motivation.

A 31 years old male Health Care Professional from one HC said:

“first of all the supervision is low in frequency and irregular, at the time of supervision they remind you of the rules and control you, while individual efforts go unnoticed, mistakes or shortcomings are noticed immediately”

Judging from the answers provided, the feedback that health workers receive from their supervisors in public health facilities usually centres on specific shortcomings or technical aspects of service provision.

The study identified opportunity to continue education and professional’s development as important influential factors of job motivation which is similarly identified by WHO [4]. This is might be due to absence of curriculum for further education or lack of awareness by lower level health care professionals.

Slightly above three quarter 77% of health care professionals believes that they got proper assistance from the regional health beuro and Ministry of Health which is contradicted with finding from Mali where there is lack of proper assistance from Ministry but lack of supervision, continuing education, absence of housing and the absence of basic amenities such as water and electricity were considered to negatively affect work motivation in both case [46], which is strongly supported by

A 30 years old male Health Care Professional from one HC said:

“... At country level we have best policy and strategy but what is wrong is its administration in lower level which is totally irrespective of the written document,, this health

center is very far from Woreda town where there is no water, network and electricity, even we don't get food sometimes, Regionals Health Beuro ordered to build house but the zonal and Woreda health office is not doing in such a way this is might be due to lack of resources.

This study shows that 93% of health care professionals said the salary is not compensatory of their services and 53% of services are provided in poor conditions this is similar with study done in Northern Viet Nam [36]. This is might be due to shortage of resource to allocate in sufficient amount to meet unmet need of health care professionals and financial inflation.

5. Conclusion

All most all of health care professionals were not satisfied by current salary. The professionals also complain that duty payment is not along with national pay; around half of health care professionals work in health centers that lacks basic medical equipment's, drug and laboratory supplies, above half of health care professionals not get equal chance for training most of the time the health center heads gives for irrelevant (unconcerned) individual as evident from in-depth interview, only less than one fifth of health professionals clearly now that they have chance of continuing further education or career development.

References

- [1] Kanfer R. Measuring job Motivation from three district in Zambia, Working Paper 1. Bethesda MD: Partnerships for Health Reform, BMC, Abt Associates Inc 1999. vol 2 (4): 12-14.
- [2] Helepota, H. A. Motivation Theories and their Application in Construction Cost in Kenya. Kenyan national health J asso. 2005; vol (5): 23-27.
- [3] Teshager K, Ma A, Assfaw S, Mba Y, Neda Y, Mba L, et al. An Exploration of Competency Gaps in Human Resource Management in the Health Sector in Ethiopia Ethiopian J health development 2006; vol 1 (5): 32-35.
- [4] World Health Organization. The World Health Report. Working Together For Health, 2006; vol 27 (14): 16-19.
- [5] Songstad NG. Health worker motivation in a low-income context. Kampala. BMC Health Services Research 2012; vol 6 (9): 77-79.
- [6] Willis-Shattuck, M., Bidwell, P., Thomas, S., Wyness, L., Blaauw, D., and Ditlopo, P. Motivation and retention of health workers in developing countries: A systematic review. BMC Health Services Research 2008, 8, 247.
- [7] Kamanzi J, Degree H. motivation levels among nurses working in public health facilities of Rwanda. BMC Health Services Research 2011; 13 (2): 119-31.
- [8] Garcia-Prado, A. "Sweetening the Carrot: Motivating Public Physicians for Better Performance". The World Bank, Policy Research Working Paper 3772. Ghana Health Service annual report of performance 2007.
- [9] Rowe, A. K., de Savigny, D., Lanata, C. F, and Victora, C. G. "How Can We Achieve and Maintain high quality performance of healthcare workers in low resource setting. The lancet 366, 2008; 1026-1035.
- [10] Dieleman, M., Toonen, J., Toure, and Martineau T. 'The Match between Motivation and Performance Management of Health Sector Workers in Mali 2006. (<http://www.human-resources-health.com/content/4>) (Accessed 2/12/2014).
- [11] Franco, L. M., Bennett, S., and Kanfer, R. Health Sector Reform and Public Sector Health Worker Motivation: A conceptual Framework. Social Science and Medicine, 2011, 54 (8), 1255-1266.
- [12] Dieleman, M., Cuong, P., Anh, L., and Martineau, T. "Identifying Factors for Job Motivation of Rural Health Workers in North Viet Nam" 2012. (<http://www.human-resources-health.com/content/1/1/10>). (Accessed on 22/11/2014).
- [13] Chen, L, Evans, T., Anand, S., Boufford, J. I., et. al. Human resources for health: overcoming the crisis. Lancet 2008; 364: 1984-1990.
- [14] WHO, Taking Stock: Health worker shortages and the response to AIDS. HIV? AIDS Programme, World Health Organization, 2007. Engineering, Vol. 47, No. 3 pp. 14-35.
- [15] Kebede S, Mantopoulos J, Ramanadhan S, Cherlin E, Gebeyehu M, et al. Educating leaders in hospital management: a pre-post study in Ethiopian hospitals. Global Public Health 2012; 7.
- [16] Delobelle P, Rawlinson JL, Ntuli S, Malatsi I, Decock R, et al. Job satisfaction and turnover intent of primary healthcare nurses in rural South Africa: a questionnaire survey 2011.
- [17] Serneels P, Barr A, Serneels P. Intrinsic Motivations and the Non-Profit Health Sector: Evidence from Ethiopia. 2010;(4746).
- [18] Melkidezek T. Leshabari, Eustace P. Y. Muhondwa 1, M. A. Mwangu, Naboth A. A. Mbembati "Motivation of Healthcare Workers in Tanzania: A Case Study of Muhimbili National Hospital", East African Journal of Public Health, 2008 Volume 5 Number 1.
- [19] Mbindyo, P. Lucy Gilson, Duane Blaauw and Mike English "Contextual influences on Health worker motivation in district hospitals in Kenya", Implementation Science 2009, 4: 43 doi: 10.1186/1748-5908-4-43.
- [20] Girma S, Yohannes AG, Kitaw Y, Ye-ebiyo Y, Seyoum A, Desta H. Human Resource Development for Health in Ethiopia: Challenges of Achieving the Millennium development Goals 2009.
- [21] World Bank. "Education in Ethiopia: Strengthening the Foundation for Sustainable Progress, Human Development Department (AFTH3). 2005 February.
- [22] Fauziah w, yusoff w, kian ts, talha m, idris m. herzberg ' s two factors theory on work motivation : does its work for todays environment ? mbc 2013; 2 (5): 18-22.
- [23] Alliance GHW. GUIDELINES : incdnitive for health care professionals. BMC 2008; vol 5 (4): 10.
- [24] Mullins, J. Management and Organizational Behavior. New Jersey: FT Prentice Hall, Eastern Mediterranean Health Journal, 2009, Vol. 13, No. 5.

- [25] Kressler, H. Motivate and Reward: Performance Appraisal and Incentive System for Business Success. New York: Palgrave Macmillan, PubMed 2008; vol 5 (3): 37-38.
- [26] Jones, G, and George, J, Contemporary Management, Boston: McGraw-Hill 2006; 10.
- [27] Petcharak, P., The Assessment of Motivation in the Saint Paul Hotel Employees, retrieved from: <http://www2.uwstout.edu/content/lib/thesis/2002/2002petcharakp.pdf>, 2007 (Accessed on: 12/12/2014).
- [28] Alderfer, Clayton P., an Empirical Test of a New Theory of Human Needs; Organizational Behavior and Human Performance, retrieved from: [http://dx.doi.org/10.1016/00305073\(69\)90004?X](http://dx.doi.org/10.1016/00305073(69)90004?X), 1969 (Accessed on: 23/12/2014).
- [29] Lai, C. (2009), Motivating Employees through Incentive programmes retrieved from: https://publications.theseus.fi/bitstream/handle/10024/17561/jamk_123744488_5.pdf?sequence=2, (Accessed on: 11/12/2014).
- [30] Herzberg, Frederick, the Motivation to Work, New York: John Wiley and Sons 1959; 8.
- [31] Griffin. R., Management, Boston: Houghton Mifflin Company East African Journal of Public Health 2008; vol 4 number 3: 56-57.
- [32] Habib, M. N., Mukhtar, S., Jamal, W. Factors Influencing the Teachers Intentions to Quite in Private Sector Higher Educational Institutions of Pakistan. Interdisciplinary Journal of Contemporary Research Business, 2010 vol. 1, p. 12.7.
- [33] Wong, S., Siu, V., and Tsang, N.,. The impact of demographic factors on Hong Kong hotel employees' choice of job? Related motivators. International Journal of Contemporary Hospitality Management, vol. 11 (5), pp. 230? 241. Retrieved from: <http://www.cabdirect.org/abstracts/20001804674.html;jsessionid=56B0080542E23B43C3FDBFC62637D55A>, (2009 (accessed on: 02/12/2014)
- [34] McShane. S, L., and Von Glinow. M, A., Organizational Behavior, New York, McGraw-Hill East African Journal of Public Health 2010; vol 12 number 16: 16-18
- [35] Peters D. H, Subrata Chakraborty, Prasanta M., Laura S. “Job satisfaction and motivation of health workers in public and private sectors: cross-sectional analysis from two Indian states” 2010. (<http://www.human-resources-health.com/content/8/1/27>). (Accessed on 17/12/2014).
- [36] Dieleman, M., Cuong, P., Anh, L., and Martineau, T. (2009) “Identifying Factors for Job Motivation of Rural Health Workers in North Viet Nam” 2009, (<http://www.human-resources-health.com/content/1/1/10>). (accessed on 20/12/2014).
- [37] Dieleman, M., Cuong, P., Anh, L., and Martineau, T. “Identifying Factors for Job Motivation of Rural Health Workers in North Viet Nam” 2012. (<http://www.human-resources-health.com/content/1/1/10>). (Accessed on 22/11/2014).
- [38] Oluwabunmi, O. C., Joseph, T. A., Clara L. E, Amos, P. B, and Ayuba, I. Z. (). “Perceptions of working conditions amongst health workers in state-owned facilities in northeastern Nigeria” 2010, (www.annalsafmed.org), (accessed on 12/12/2014).
- [39] Kebriaei A. I and M. S. Moteghedhi I. “Job satisfaction among community health workers in Zahedan District, Islamic Republic of Iran”, Eastern Mediterranean Health Journal, 2009, Vol. 15, No. 5.
- [40] Garcia-Prado, A. “Sweetening the Carrot: Motivating Public Physicians for Better Performance”. The World Bank, Policy Research Working Paper 3772. Ghana Health Service annual report of performance 2007.
- [41] Dieleman, M., Toonen, J., Toure, and Martineau T. ‘The Match between Motivation and Performance Management of Health Sector Workers in Mali 2006. (<http://www.human-resources-health.com/content/4> (Accessed 2/12/2014).
- [42] Pillay, R. (2009) “Work satisfaction of professional nurses in South Africa: a comparative analysis of the public and private sectors”, (<http://www.human-resources-health.com/10.1186/1478-4491-7-15>). (accessed on 15/11/2014).
- [43] Wilbroad Mutale, Helen Ayles, Virginia Bond, Margaret Tembo Mwanamwenge and Dina Balabanove “Measuring health workers motivation in rural health facilities”: base line results from three district of Zambia. Mutale et al. Human Resource for Health 2013, 11: 8, <http://WWW.human-resourec-health.com/content/11/1/8> (accessed on 15/11/2014).
- [44] Franco LM, Bennett S, Kanfer R. Health sector reform and public sector health worker motivation a conceptual framework. Social Science and Medicine. 2008 PubMed; 54: 1255–1266. Doi: 10.1016/S0277-9536 (01) 00094-6.
- [45] J. Kamanzi, Z. Z Nkosi, Motivation levels among nurses working in public health facilities of Rwanda PubMed 2008; vol 7 (2): 13-15.
- [46] Ogenna Manafa, Eilish McAuliffe, Fresier Maseko, Cameron Bowie, Malcolm MacLachlan and Charles Normand, Retention of health workers in Malawi: perspectives of health workers and district management, Human Resources for Health 2009, 7: 65 doi: 10.1186/1478 4491-7-65.
- [47] Agyepong, I. A., Patricia Anafi, Ebenezer Asiamah, Evelyn K. Ansah, Daniel A. Ashon and Christiana Narh-Dometey “Health worker (internal customer) satisfaction and motivation in the public sector in Ghana”. International Journal of Health Planning and Management 2008. (www.interscience.wiley.com). (accessed on 12/12/2014).
- [48] Lin P Y (2007), The Correlation between Management and Employee Motivation in SASOL Polypropylene in Business, South Africa, retrieved from: <http://upetd.up.ac.za/thesis/available/etd?08042008?92827>, (Accessed on 10/12/2014).
- [49] Latham, G. Work Motivation: History, Theory, Research, and Practice. California: Sage Publications, 2007; vol 4 number 7: 19-20.
- [50] Nebiat Nigussie. Relationship between rewards and nurses' work motivation in Addis Ababa hospitals Ethiop J Health Sci. Jul 2012; 22 (2): 107–112. PMID: PMC3407833.
- [51] Marjolein Dieleman, et al I believe that the staff have reduced their closeness to patients: an exploratory study on the impact of HIV/AIDS on staff in four rural hospitals in Uganda, PubMed 2007, <http://www.biomedcentral.com/1472-6963/7/205/prepub> (Accessed on 10/12/2014).
- [52] Joses Muthuri Kirigia and Gatwiri Kirigia. The essence of Governance in health development open access, international archive of medicine. Kirigia and Kirigia international archives of medicine 2011.