

# ***THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT***

## **Job Motivation and Associated Factors among Hospital Staffs at Nigist Eleni Mohammed Memorial General Hospital, Hadiya Zone, SNNPRS**

**Yeshanew Ayele Tiruneh**

CASH Initiative Coordinator, Wachemo University, Nigist Eleni Mohammed Memorial Referral Hospital,  
Nigist Eleni Mohammed Memorial Referral Hospital, Hadiya Zone, SNNPRS, Ethiopia

**Waju Beyene Salgado**

Associate Professor, Jimma University Department of Health Economics Management and Policy,  
College of Public Health, Department of Health Economics, Management and Policy of Jimma University, Jimma, Ethiopia

**Ayningida Adamu Walle**

Lecturer, Jimma University Department of Health Economics Management and Policy,  
College of Public Health, Department of Health Economics, Management and Policy of Jimma University, Jimma, Ethiopia

**Fikru Tadese Mekonen**

Lecturer, Hawasa University, College of Medicine and Health Sciences, School of Nursing and Midwifery,  
College of Medicine and Health Sciences, School of Nursing and Midwifery, Hawassa University, Hawasa, Ethiopia

### **Abstract:**

*Back ground: Health worker's motivation reflects the interactions between workers and their work environment. Motivation has necessary to generate the organizational commitment towards the patients and the hospital and there for the knowledge about what motivates and satisfies them is very essential. Human resource is a vital component in delivering health services. Health systems cannot function effectively without sufficient numbers of skilled and motivated health workers. Because of the interactive nature of motivation, local organizational and broader sector policies have the potential to affect motivation of health workers, either positively or negatively, and as such to influence health system performance. Yet little is known about the key determinants and associated factors of motivation in developing countries.*

*Objective: The main objective of this study was to assess job motivation and associated factors among Hospital staffs at Nigist Eleni Mohammed Memorial General Hospital, Hadiya Zone, Southern Nations and Nationalities of Peoples Regional State, Ethiopia.*

*Materials and methods: A facility based cross-sectional study design was employed from May 1 to June 15, 2016. The study population included all hospital workers at N/E/M/M/G Hospital from all departments and wards at the time of the study. Quantitative data was collected using a self-administered questionnaire. To ensure quality and validity of these tools, a pre-test was conducted on 5% of the study unit in Hospital out of the study site. The data was analyzed using the statistical package for social science (SPSS) version 20. Mean motivation calculated as percentage of maximum scale score was used. Bivariate and multiple linear regression analyses were done to see the independent effects of explanatory variables.*

*Result: The overall motivation level of hospital workers was 62.06%. The highest percentage was for intrinsic motivation 83.26%, timeliness 79.49%, organizational commitment 79.49%, organizational conscientiousness 67.31% and organizational burnout 34.72%. In multiple linear regression analysis job content, coworkers' relationship, supervisor worker relationship, age of respondent, Feedback, remuneration, marital status was found to be significant predictors of hospital worker's motivation.*

*Conclusion: More than ¾ or 81% of the Hospital staffs showed a mean motivation score of greater than 50%. Supervisor-worker relationship, feedback mechanism, co- worker's relationship, and training were an important factor for motivation. Remuneration and job content related factors were found to be less motivating. The result showed variation in motivation score by gender, type of workers, training and time in post. Therefore, Hospital, zonal and regional health office administrators should focus on these tools to alleviate motivation problems.*

**Keywords:** Motivation, intrinsic, commitment, conscientiousness, burnout, timeliness, Hospital workers, coworkers, job

### **1. Introduction**

Motivation is a person's degree of willingness towards achieving an individual goal that is consistent with that of the organization and the reasons underlying behavior. It can be also defined as the processes that account for an individual's intensity, direction and persistence of effort toward attaining a goal, and the attribute that moves individuals to do or not to do something(1). Motivation of health worker is necessary to generate the organizational commitment towards the patients and the hospital and there for the knowledge about what motivates and satisfies them is very essential(2).

Human resource for health is a vital component in delivering health services. Health systems cannot function effectively without sufficient number of skilled, motivated and supported health workers(3).

Health worker motivation reflects the interactions between workers and their work environment. Because of the interactive nature of motivation, local organizational and broader sector policies have the potential to affect motivation of health workers, either positively or negatively, and as such to influence health system performance(4).

A prerequisite for a well-functioning health system is a well-motivated staff. Low level of health worker motivation has often been identified as a central problem in health service delivery among existing human resources(5).

However, African health systems are not only experiencing one of the greatest staff shortages, but clinical staff is currently faced with weak institutional frameworks and distortive incentive structures, ineffective management practices and adverse work environments at systemic and organizational level, resulting in an overburdened health workforce with low levels of work motivation(6).

Evidences from Ethiopia shows the health system have been trying to improve the quality of health care services through undergoing massive health sector reforms(HSRs) like the business process and re-engineering (BPR), health care financing (HCF), health management information system (HMIS)and the Ethiopian Hospitals reform implementation guide line (EHRIG)(7). But the public health sector which accompanies a large amount of human resource is ineffective, inefficient as well as the health service being delivered through have been seriously affected by poor human resource management. Many trained health staff are leaving to work in the private sector or migrating overseas(8).

Despite interest in the question of what can be done to strengthen hospital worker's motivation, little is currently known about which factor of motivation are the most important to different levels of the staffs in hospital settings. Few studies available have concentrated on job satisfaction (joy or pleasure of working and it is the sense of accomplishment after having done a job in a flawless manner, it is a type of intrinsic motivation) of health professionals only at hospital setting rather than job motivation (what is believed to be behind the behavior of employees) and associated factors.

Thus, the aim of this study is to assess level of job motivation and associated factors among hospital workers working at Nigist Eleni Mohammed Memorial General Hospital, Southern, Ethiopia.

## 2. Methods

A cross-sectional facility based study was conducted from May 1 to June 15; 2016. The hospital is located 232 k/m south west of Addis Ababa (capital of Ethiopia) and 165 k/m from the regional city Hawasa. It is 250 bedded meant to service for 2.4 million zonal and the nearby population.

The study populations were all permanently employed hospital staffs from all departments and wards at the time of the study.

Quantitative data was collected using a self-administered questionnaire adapted from different literatures (9-12). The questionnaires contained socio-demographic variables, performance review, training, additional remunerations, benefits, flexible work schedule, opportunity of staff development, availability of resources, communication and institutional related variables. It also contained outcome constructs of motivation (3 items of intrinsic motivation, 7 items of organizational commitment and 4 items of organizational conscientiousness and timelines) with responses in five label Likert scale. The tool was translated in to Amharic languages to ensure ease of use.

The reliability of the questionnaire was assessed by Cronbach's alpha with consideration at least .70. Kaiser-Meyer-Olkin measure of sampling adequacy were checked and found to be 0.786, greater than the standard acceptable level 0.5. The diagonal anti-image correlation was checked for sampling adequacy and all of them were >0.5. The principal component analysis (PCA), Bartlett test of sphericity and multi co linearity >0.9 was checked and the result shows Bartlett's test of significance was 0.00. Correlation was performed through Pearson's correlation coefficient "r" for factor loadings and  $r > 0.4$  was used as cut-off point. Outliers were checked by sorting ascending each of the saved factor variables. Rotated component matrix was done to check multi co linearity and factors with less than three variables were removed from further analysis.

The feedback factor questions were made up of three subsets. In the remuneration & staff development tool, respondents were asked to rate their agreement in five item questions. The coworker's relationship questionnaire was asked to rate their agreement in three item questions. The supervisor-worker relationship factor related questions were made up of five subsets. The job content tool measures how the content of the job is reasonable in these hospitals, respondents were asked to rate their agreement to three items. The reliability coefficient (Cronbach's alpha) was .749, .759, .818, .868, .701, respectively and indicating that the scale was highly internally consistent.

*Conscientiousness* was measured by 3 items. Within the *organizational commitment* tool Hospital workers were asked four questions to rate different aspects of organizational perception. *The intrinsic motivation* and timeliness questions were asked in four item questions. Burnout was measured by 3 items

The data was collected by 2 diploma nurses and 1 BSC nurse for supervisor recruited from other health institution. The dependent variable of measurement was job motivation.

## 3. Operational Definition

**Motivation:** refers to willingness to exert high levels of effort towards organizational goals. It was measured by examining four underlying issues grouped around relevant outcome constructs: intrinsic motivation, organizational commitment, burnout, conscientiousness and timeliness.

**Overall motivation**-Overall motivation was created by computing factor scores created after factor analysis of the outcome constructs of motivation: Those with %SM less than 50% were considered as de motivated(13, 14).

$$\text{Percentagemean score(\% SM)} = \frac{\text{Actualscore} - \text{minimumscore}}{\text{Maximumscore} - \text{Minimumscore}} * 100\%$$

Data was entered into Epi data version 3.1 and exported to statistical package for social science (SPSS) window version 20.0 for the analysis. Different tests were used to analyze data including data exploration, frequencies, means and percentage, to describe each individual variable. Pearson correlation test to measure the association between two variables (independent and dependent variables) and the strength of their relationship, adjusted R<sup>2</sup> (Coefficient of determination) used to measure a total variation in outcome, ANOVA for test of significance of the multiple linear regression, and t test. Reliability tests were employed on SPSS to check the instrument internal consistency. The results of the study presented in tables and figures. The scales for negatively worded questions was reverse coded so that 1 'strongly agree' and 5 'strongly disagree' before analysis. To facilitate treatment of variables as continuous measures during further analysis factor analysis was used for all Likert scale questioners. Bivariate (both for correlation and regression) analyses were used to assess the relationships between independent and dependent variables. Then, multiple linear regression analysis was employed to identify the predictors. Variables with significance level of 0.25 or less were entered into the multivariate analysis to rule out confounders. Mean score of the respondents was calculated as percentage of maximum scale score that used for measuring level of motivation of hospital worker.

The questionnaire was pretested on five percent of the sample at a Hospital outside of the study area. One day training was given to data collectors and the supervisor. The data collection process was checked daily for consistency and completeness by the supervisor. Ethical clearance was obtained from the Ethical Review Committee of the College of Public Health, Jimma University and permission to conduct the study was also gained from the Chief Executive Officer of the Hospital. Confidentiality and anonymity were ensured throughout the execution of the study.

## 4. Results

### 4.1. Socio Demographic Characteristics of Respondents

A total of 218 questionnaires were correctly completed representing 86.5% response rate. Most of the participants were male (117/53.7%). The median age of respondents was 30. The skill mix of respondents showed 65(29.81%) were nurses and 35(15.9%) cleaners among others. Out of the total respondents 88(40.36%) were diploma, 64(29.35%) degree, 61(27.98%) were less than diploma level. Majority of the staffs were married 143(65.59%). 176(80.73%) of the respondent were protestant by the religion. Majority of the hospital staffs, 103(47.24), were in the age group 20-29 years old. 179(82.1%) of the respondent's salary were less than 3000 ETB (Table 2).

Variables		N(%)	% of mean	95% CI	SD
Sex	M	117(53.66%)	62.85	(59.64,64.61)	13.49
	F	101(46.33%)	62.13	(59.79,65.91)	15.33
Marital status	Married	143(65.59%)	62.59	(59.6,64.99)	14.43
	Single	67(30.73%)	61.48	(58.16,64.81)	13.53
	Divorce	5(2.29%)	64.16	(38.90,89.42)	20.34
	Widowed	3(1.37)	74.86	(61.26,87.36)	14.29
Education	1to4	7(3.2%)	79.1	(64.53,93.68)	15.76
	5to8	11(5%)	68.25	(60.49,76.06)	11.62
	9to12	43(19.7%)	67.39	(63.46,71.32)	12.45
	Diploma	88(40.36%)	61.98	(58.88,65.09)	14.65
	Degree	64(29.35%)	57.15	(53.82,60.48)	13.2
	Specialist	5(2.29%)	61.16	(49.80,72.53)	9.15
Profession	Doctor	17(7.79%)	58.23	(54.91,61.50)	6.46
	Nurse	65(29.81%)	61.2	(57.61,64.79)	14.25
	Pharmacy	14(6.42%)	56.38	(44.24,68.53)	15.8
	laboratory	14(6.42%)	59.25	(54.51,63.99)	8.21
	Midwifery	16(7.33%)	67.16	(58.99,75.32)	15.32
	Finance	15(6.9%)	60	(47.92,72.07)	20.9
	Cleaners	35(15.59%)	71.97	(67.06,76.87)	14
	Archive workers	11(5.04%)	67.2	(63.08,70.06)	11.3
	Anesthetist	9(4.12%)	61	(56.16,65.04)	7.9
	Data clerk	7(3.21%)	59.6	(53.06,65.16)	13.2
Religion	Guard	6(2.75%)	60.2	(56.01,64.23)	9.76
	Other ***	9(4.1%)	63.3	(55.19,70.24)	7.67
	Protestant	176(80.73%)	62.81	(60.67,64.95)	14.24
	Orthodox	32(14.67%)	62.6	(57.02,68.18)	15.48
	Catholic	4(1.83%)	52.18	(35.73,68.63)	10.33
Training	Other*	6(2.75%)	59.41	(42.43,76.40)	13.67
	Yes	68(31.19%)	65.91	(62.28,69.54)	14.88
Remuneration	No	150(68.80%)	60.9	(58.65,63.15)	13.85
	Yes	103(47.24%)	61.4	(58.61,64.18)	14.16

	No	115(52.76%)	63.42	(60.72,66.12)	14.18
performance review	Formal	172(78.89)	63.13	(60.90,65.36)	14.7
	Informal	41(18.80)	59.9	(56.06,63.75)	12.19
	Nothing	5(2.29%)	60	(29.06,90.93)	19.43

Table 1: Socio demographic characteristics and Mean motivation score of Hospital workers in N/E/M/M/G/Hospital, Hadiya zone, S/N/N/P/R, Ethiopia, June 2016 (N=218)

\*Other: Adventist, Wakefeta, and Muslim      \*\*Other: Oromo, Silte, and Wolayta  
 \*\*\*Other: psychiatry, optometrist, sanitary science, physiotherapist, cataract surgeon

4.2. Bi Variate Correlation Analysis

The bi-variate correlation analysis of the motivation dimension and other factors revealed that organizational commitment was significantly associated with job content, coworker’s relationship, supervisor worker relationship, and age positively at  $r=.410, .289, .326, .286$  respectively and with educational level, salary and profession negatively at  $r= .343, .228, .234$  respectively and at  $p= 0.01$  level. Conscientiousness was significantly positively associated with Feedback, remuneration, job content, age, coworker’s relationship and supervisor worker relationship at  $r=.271, .340, .283, .215, .182, .282$  respectively and at  $p= 0.01$  level. Timeliness dimension of motivation also correlate with job content factors and coworker’s relationship factor at  $r=.202$  and  $.212$ ,  $p=0.005$  level. Burn out dimension of motivation correlate with age, feedback, conscientiousness and profession at  $p=0.01$ , organizational commitment and remuneration at  $p=0.05$ , educational level and salary negatively correlate with the burnout dimension of motivation at  $p=0.001$ . The Pearson correlation coefficient between different factors was shown in table 3.

		Conscientiousness	Feedback	Intrinsic	Timeliness	Burnout	Commitment	Remuneration	Job content	Co-worker r/s	Supervisor worker r/s	Age	Educational level	Net salary	any additional remuneration	performance review	profession
Conscientiousness	Pearson r	1															
Feedback	Pearson r	.271**	1														
Intrinsic motivation	Pearson r	0.066	-0.066	1													
Timeliness	Pearson r	.165*	-0.055	.562**	1												
Burnout	Pearson r	.379**	.206**	-0.011	-.088	1											
Organizational Commitment	Pearson r	.442**	.454**	.285**	.188**	.248**	1										
Remuneration	Pearson r	.340**	.374**	-0.073	0.002	.163*	.144*	1									
Job content	Pearson r	.283**	.402**	0.048	.202**	0.02	.410**	.433**	1								
Coworker r/s	Pearson r	.182**	.232**	.230**	.212**	0.095	.289**	.147*	.249**	1							
Supervisor worker r/s	Pearson r	.282**	.291**	0.014	-0.073	-0.105	.326**	.335**	.346**	.435**	1						
Age	Pearson r	.215**	0.084	0.035	-0.071	.184**	.286**	0.008	0.034	.173*	0.056	1					
Educational level	Pearson r	-.138*	-.167*	-0.067	-0.019	-.338**	-.343**	.145*	-0.032	-0.076	0.057	-.454**	1				
Net salary	Pearson r	-0.091	-0.12	0.004	-0.068	-.288**	-.228**	.188**	0.013	-.168*	0.06	-.199**	.553**	1			
Performance review	Pearson r	-0.096	-0.127	-0.023	-0.061	0.075	-.139*	-0.013	-0.079	-0.074	-0.023	-0.048	0.036	-0.056	.137*	1	
Profession	Pearson r	0.041	0.061	-0.07	-0.049	.180**	.234**	-.166*	0.039	.172*	-0.002	.395**	-.358**	-.437**	.332**	0.029	1

Table 2: Bivariate analysis of motivation dimension and associated factors among hospital staffs in N/E/M/M/G/Hospital Hadiya Zone S/N/N/P/R, Ethiopia, June, 2016

\*\* Correlation is significant at the 0.01 level (2 tailed).

\* Correlation is significant at the 0.05 level (2 tailed).

4.3. Predictors of Motivation

4.3.1. The Organizational Commitment Dimension of Motivation

Organizational commitments were high for midwives, cleaners and laboratory workers 88.5%, 87.5%, and 87.5% respectively but lower for pharmacy and finance workers 75% and 74.07%. Female respondents show high organizational commitment 71% than male

64.74%. Variables that had association by Bivariate regression analysis at significance level of 0.25 or less were entered into the multivariate regression analysis to rule out confounders. The multiple linear regression analysis was conducted to test the effects of the independent variables on the dependent variable. Feedback, ( $p < 0.001$ ), job content ( $p < 0.001$ ), supervisor worker relationship ( $p < 0.01$ ) and educational level 1-4 ( $p < 0.05$ ) salary 3001-4000 were significant predictors of organizational commitment dimension of motivation.

Beta coefficients represent contributory weights in predicting organizational commitment dimension of job motivation. A unit change increase or decrease in feedback, job content, and supervisor worker relationship, increase or decrease organizational commitment of motivation score by an average of .256 unit (95% CI: .129, .382), .205 unit (95% CI: .084, .326), .188 unit (95% CI: .0051, .326), point respectively and, workers whose educational level grade 1-4 was higher organizational commitment than the other educational level. Those whose salary level 3001- 4000 was negative predictor of organizational commitment of beta value -2.765.

The results further suggested that feedback; job content, supervisor worker relationship and educational level can significantly influence commitment to the hospital. (see table 4).

Explanatory variable	Category	F	Un standardized coefficients	standardized coefficients	Sig.	95% CI for B	
			B	Beta			
(Constant)			36.152		0.1	- 6.972	79.275
Educational level	1to4	7	18.562	0.137	.027*	2.141	34.982
	Diploma#	88	-	-	-	-	-
Salary	2000to3000#	73	-	-	-	-	-
	3001to4000	20	-2.765	-0.136	.033*	- 5.311	-0.219
Feedback			0.256	0.262	.000***	0.129	0.382
Supervisor worker r/s			0.188	0.183	.008**	0.051	0.326
Job content			0.205	0.228	.001**	0.084	0.326

Table 3: Multiple linear regression analysis of organizational commitment motivation dimension and socio demographic variables in Nigist Eleni Mohamed memorial General Hospital, Hadiya Zone, SNNPR, Ethiopia, June 2016 (n=218).

#References category (categories with highest frequency taken as reference categories)

\*-significant at  $p < 0.05$ , \*\*-significant at  $p < 0.01$ , NB: negative values of un standardized  $\beta$  indicate negative predictors of organizational commitment dimension of motivation and positive values indicate positive predictors of organizational commitment dimension of motivation

#### 4.3.2. The Organizational Conscientiousness Dimension of Motivation

Organizational conscientiousness had no difference between male and female as well as between professions, but significant difference observed between educational level, those educational levels under grade eight shows more conscientiousness 62.5% than those educational levels degree and above. Multi variate regression analysis of socio-demographic variables and independent variables with conscientiousness dimension of motivation of hospital workers showed that marital status ( $p < 0.001$ ), length of service ( $p < 0.01$ ) age of respondent ( $p < 0.05$ ), educational level ( $p < 0.05$ ), performance review ( $p < 0.05$ ) were significant predictors of organizational conscientiousness dimension of motivation.

The highest age range (50-59) was significantly positive predictors of organizational conscientiousness; this is the same for highest length of service. Educational level of 9-12 grades was negative predictors of organizational conscientiousness dimension of motivation. A unit change increase in remuneration and job content, organizational conscientiousness increased by .162 unit (95% CI: -.002, .372), and .132 unit (95% CI: -.010, .273), respectively. (see table 5).

Explanatory variable	Category	F	unstandardized coefficients	standardized coefficients	Sig.	95% CI for B	
			B	Beta			
(Constant)			-13.321		0.612	-65.081	38.439
Age	19to29#	103	-	-	-	-	-
	50to59	25	12.932	0.65	.032*	1.091	24.773
Educational level	9to12	43	-4.253	-0.204	.033*	-8.149	-0.358
	Diploma#	88	-	-	-	-	-
Length of service in years	<5 years#	79	-	-	-	-	-
	11 to 15	25	0.459	0.171	.020*	0.212	0.671
	16 to 20	13	0.349	0.203	.005**	0.066	0.632
Performance review	formal #	172	-	-	-	-	-
	in formal	41	-5.163	-0.162	.013*	-9.213	-1.112
Remuneration			0.162	0.151	.050*	-0.002	0.327
Job content			0.131	0.141	.050*	-0.01	0.273
Marital status	Single	67	5.02	0.186	0.011*	1.181	8.86
	Divorce	5	1.169	0.237	.000***	6.056	20.283
	Married#	140	-	-	-	-	-

Table 4: Multiple linear regression analysis of organizational conscientiousness, independent variables and socio demographic variable in Nigist Eleni Mohammed Memorial General Hospital Hadiya Zone SNNPR, Ethiopia, June 2016 (n=218). #References category (categories with highest frequency taken as reference categories). \*-significant at p<0.05, \*\*-significant at p<0.01, \*\*\*-significant at p<0.001. NB: negative values of un standardizedβ indicate negative predictors of organizational conscientiousness dimension of motivation and positive values indicate positive predictors of organizational conscientiousness dimension of motivation.

4.3.3. The Timeliness Dimension of Motivation

Standardized percentage of mean score value of perceived timeliness for male was higher than female. Doctors and cleaners perceive they are more timeliness than the other profession. The regression model shows remuneration, job content and coworker’s relationship was positive predictor of timeliness dimension, but feedback was negative predictors of timeliness dimension of motivation. A unit change increase in remuneration, job content and co-worker relationship, timeliness increase by 0.263 unit (95% CI: 0.106, 0.420), 0.233unit (95% CI: 0.095, 0.371) and 0.268 unit (95% CI: 0.099, 0.437) respectively. (See table 6).

4.3.4. The Intrinsic Motivation Dimension

Intrinsic motivation was higher for midwives, nurses and laboratory professionals than pharmacy and finance workers which was 88.5%, 85.64%, 87.5%, 74% and 75% respectively. Unit of work area had variation for intrinsic motivation, delivery and inpatient ward workers was more intrinsic motivation than operation room and finance workers. The analysis demonstrated that the most significant variable of intrinsic motivation dimension indicating that co-worker’s relationship was the highest significant factor at (p<0.000), followed by marital status and performance utilization.

A unit change increase in co-worker’s relationship, intrinsic motivation increased by 0.230 unit (95% CI: 0.111, 0.349). The hospital staff perceived that the performance review utilization in the hospital was for nothing (no value) at P value of 0.010 unit and other variables was found insignificant predictors of intrinsic dimension of motivation (see table 7).

Explanatory variable	category	F	un standardized coefficients	standardized coefficients	Sig.	95% Confidence Interval for B	
			B	Beta		Lower Bound	Upper Bound
(Constant)			65.923		.000	55.702	76.14
Coworker’s r/s			.230	.253	.000***	.111	.349
Marital status	Married#	143	-	-	-	-	-
	Divorce		-6.094	-.159	.017*	-11.10	-1.08
Performance utilization	Promotion#		-	-	-	-	-
	Nothing		.229	.179	.010*	.297	2.160

Table 5: Multiple linear regression analysis of intrinsic motivation dimension and socio demographic variable in Nigist Eleni Mohamed memorial general hospital Hadiya zone, SNNPR, Ethiopia, June, 2016 (n=218). #References category (categories with highest frequency taken as reference categories) \*-significant at p<0.05, \*\*\*-significant at p<0.001NB: negative values of un standardizedβ indicate negative predictors of intrinsic dimension of motivation and positive values indicate positive predictors of intrinsic dimension of motivation.

#### 4.3.5. The Burn out Dimension

The significant predictors of motivation as demonstrated by the burn out dimension of motivation was age, education, length of service and remuneration were found significant predictors of burn out dimension of motivation at  $p < 0.05$ . Remuneration was the most significant predictors of burn out dimension at  $p < 0.01$ , and a beta value of 0.272 unit.

Males were more burnout than females and doctors and other degree holders were more burnout than the other educational levels (see table 8).

#### 4.4. Over All Motivation

Training, care and support from staff, relationship with immediate boss, feedback and coworker's relationship was significant predictors of over all levels of motivation. A unit increase in care and support from staff, relationship with immediate boss and coworker's relationship, increases the motivational level of the workers by 0.257 unit, 0.493 unit and 0.179 unit at  $p < 0.01$  level and feedback and training was significant predictor of overall motivation at  $P < 0.05$  (see table 9).

#### 4.5. Motivational Levels of Respondent between the Dimensions of Motivation

Standardized percentage of mean score of the overall motivation was 62.06%. Comparison was made between the dimensions of motivation; motivation was highest for intrinsic motivation dimension (%SM) 83.26%, and lowest for burn out dimension of motivation (%SM) 34.72 % (see table 10).

Dimension of motivation	Raw mean score $\pm$ SD	Standardize percentage of mean score(%SM)	95% Confidence Interval	
			Lower	upper
Intrinsic motivation	4.29 $\pm$ 0.894	83.26%	80.7604	85.4455
Organizational commitment	3.69 $\pm$ 1.321	67.31%	64.084	70.42
Burn out	2.386 $\pm$ 1.36	34.72%	31.2596	38.2104
Timeliness	4.870 $\pm$ 0.957	79.49%	75.9246	82.7189
Conscientiousness	2.883 $\pm$ 1.348	47.00%	43.9516	50.4608
<b>Over all motivation</b>	<b>3.5<math>\pm</math>1.17</b>	<b>62.06%</b>	<b>60.41</b>	<b>64.35</b>

Table 6: Level of motivation between dimension of outcome constructs of motivation among hospital staffs in N/E/M/M/G/Hospital, Southern Ethiopia, June, 2016 (n=218)

Standardize percentage of mean score is the Standardized score as the percentage of possible maximum scale score, and it lies between 0 and 100

#### 4.6. Factors Associated to Motivation

During factor analysis, the following feedback related factors, Remuneration related factors, Job content related factors, Coworkers relationship related factors, Supervisor worker r/s related factors were found and standardize percentage of mean score(%SM) for each factor was done. Co-workers relationship related factors was the highest factor for motivation 78.372 % ( %SM), (95% CI; 77.48, 79.263) and a raw mean score of 4.12 $\pm$ 0.901SD. Remuneration related factor was the least for motivation of hospital staffs 33.744 % ( %SM), (95% CI;32.558,34.953) and a raw mean score of 2.36 $\pm$ 1.301 SD. Standardize percentage of mean score is the Standardized score as the percentage of possible maximum scale score, and it lies between 0 and 100 (Table 11).

The more the length of service was the more motivation, workers who serve 16-20 years was 73.94% of overall motivation than the less the service year. Most of 150(68.8%) the respondent was not taking any training in the preceding one year. Eighty-one-point eight percent of the Hospital staffs showed a mean motivation score of greater than 50%, and the rest were less than 50 % as calculated by percentage of maximum possible scale.

Overall motivation has no significant difference between male and female respondents, 62.85% and 62.13% respectively and the same in between of marital status. Salary and other remuneration have no significant value for motivation. Hospital worker whose salary less than 1000 has higher overall motivation (66.86%) than those whose salary was between 5001- 6000(54.47%). Those with low grade of educational level (1-4) was more motivated (79.1%) than those diploma, first degree and second degree holders 61.98%,57.15%and 61.6% respectively.

## 5. Discussion

Motivation of health workers is a key to provide good quality and accessible healthcare(15). Worker motivation also depends upon the organizational context. Organizational structures, resources, processes, and culture, as well as organizational feedback about performance, contribute to motivational processes occurring at the individual level(16).

Organizational commitment dimension of motivation score was measured, 67.31% of standardized percentage of mean score (%SD) which was greater than the standardized percentage of mean 50%. This revealed that the study hospital staffs were committed to exert and maintain efforts to the organizational mission. But the result shows that lower organizational commitment compared to the study conducted in Zambia which is 72% and better commitment than the study conducted in west Amhara, northern Ethiopia which is 52.82%(10, 11).

The frequency of the feedback given from the immediate supervisor, supervisor worker relationship and job content had significant predictors of organizational mission. Being a worker of that facility, the supervisor inspiration mechanism, the similarity of the value

of the Hospital and the worker's relationship was significant predictors of the organizational commitment. This result shows incomparable with the report of west Amhara, northern Ethiopia(11).

Organizational conscientiousness dimension of motivation score as measured by the raw mean had 2.88 and %SM was 47%. This is lower than the standardized mean of (50%) showing that the Hospital workers were not committed to exert and maintain efforts on their organizational goal/s. This is a much lower than earlier findings 71% and 88% of west Amhara, northern Ethiopia and Zambia respectively(10, 11).

The motivation level of respondents was found to be increased by 0.398 units as their age increases a year this finding was similar with the findings of Zambia and incomparable with the findings of public hospitals of west Amhara, northern Ethiopia(10, 11).

The highest score for timeliness was reported from female respondents (80%) than male (78%), this result was comparable to the study conducted in Zambia(10). Older age (50-59) workers give more value for timeliness than the other age group.

Raw mean score of intrinsic dimension of motivation was 4.29 and %SM was 83.26%; this result was just above the standardized and raw mean score indicating that the workers was motivated, this finding was comparable with the finding of Zambia (81.42%), but higher intrinsic motivation observed than west Amhara(58.33)(10, 11). Co-workers relationship had significant predictors for intrinsic motivation of this study, the result was supported by the study conducted in Jordan, Gaza and Kenya(17-19).

Hospital staff's perception towards performance evaluation utilization was significant for; performance evaluation was used for nothing at p-value of 0.10 and a beta value of .229. This may be due to inappropriately measuring and utilization of the performance evaluation and utilization.

Intrinsic motivation through categories of worker was more or less the same, but males were more intrinsic motivation than female this result was not consistent with west Amhara, Northern Ethiopia(10, 11). As well as married respondents was more motivated than single.

Burn out dimension of motivation was the least motivator in this study; this result was comparable with the study conducted in Zambia(10). This may be due to excessive workload and lack of resources lead to burnout

Findings from this study revealed that the overall motivation score of Hospital workers in the study area was 62.06 %, above the standardized mean (50%), indicating that hospital workers were just motivated. This finding was lower than the study conducted in Zambia which is 76.3% of overall motivation(10), and is comparable with the findings of the study carried out in central Ethiopia which was 63.63% standardized percentage of mean score(20), and small increment from the study conducted in public hospitals of west Amhara, north west Ethiopia which was 58.6 % standardized percentage of mean score(11). 81.8% of the Hospital staffs showed that a mean motivation score of greater than 50%, and the rest were less than 50 % as calculated by percentage of maximum possible scale.

Conscientiousness was the second least motivation score (47%), this result was incomparable with the study conducted in Zambia and west Amhara, northern Ethiopia, in that the score for conscientiousness was 80% and 71 % respectively(10, 11)

An increase in educational level by one unit showed a 2.68 units decrease in overall motivational status of a staff. Those who have less educational background was more motivated than others, this may be due to less expectation and comparing themselves from other workers in another institution and the remuneration they get periodically. This result has consistent with the study conducted in Iran(21). In this research there is no significant difference on overall motivation between male and female respondents of hospital workers, but a study conducted in west Amhara northern Ethiopia and Zambia shows motivation scores for females were likely to be higher than that of the male participants(10, 11).

The result showed that the longer health workers stayed in post, the more motivated they were. This was also true for age, where older health workers had higher motivation scores than younger ones this result was similar to the study conducted in Kuwait and Zambia(10, 22). It appeared that those who had stayed longer had settled and integrated well within their community, while newcomers were faced with the challenges of working and settling in new settings after completing training in different situation. This finding was crucial when discussing health worker retention schemes. The focus might be to ensure retention and reduce turnover, which is associated with many newcomers and fewer staff staying longer and hence missing out on the stability and motivation that is associated with a longer stay and age maturity.

Health workers those who were Protestant had the highest 62.81% mean motivation scores and the least for catholic which is 52.18%. This result had incomparable with the result of the study conducted in central Ethiopia which is low motivation for protestant religion followers(20). One other critical finding was that those who had attended some form of training in the preceding 12 months were more likely to have higher motivation scores when compared to those who had never attended any training. Literature has shown that in-service training could be a motivating factor for health workers rather than just a focus on higher wages. This study seems to support the need for continuous but systematic refresher training as a source of both skills and motivation (10, 23, 24).

Hospital staffs other than health professional were more motivated, this could be attributed to the fact that they may have less expectation, related to workload or they do not do the more complex jobs in hospitals, which is usually more for health professionals. This result was comparable to the study conducted in Zambia(10). More research is needed to establish why those staffs other than health professionals appeared more motivated.

### 5.1. Conclusions

Over all motivation of hospital workers were 62.06%, this is more than the standardized percentage of mean score. More than 3/4 of the Hospital staffs showed that a mean motivation score of greater than 50%, and the rest were less than 50 %, this shows that the hospital staffs were motivated to exert and maintain efforts up on their organizational goal/s. The results showed variation in motivation score by category of hospital workers, training and time in post. Further research is needed to establish why these Hospital



worker attributes were associated with motivation. Across worker's categories, Hospital workers' overall motivation score in all dimensions was not significantly associated with their absolute level of salary and financial incentives like absolute pay and top ups. The study revealed that among the independent variable, supervisor worker relationship, job content, feedback, remuneration, co-worker's relationship and training was an important factor for motivation. On the other hand, the mean value of remuneration related and job content related factors compare to other variables revealed that hospital workers were less motivated, these may be by the load of work and remuneration they get that may be not balance, regular, and inadequate.

In conclusion, the results of the study highlighted some indicators that might help decision-makers to act toward raising and reinforcing motivation that could lead to improve work performance to the highest possible levels within the available resources.

### 5.2. Recommendation

The organizations need effort to motivate the hospital workers by addressing the following. Training opportunities should be created to facilitate health workers career developments. The works achieved by hospital staffs should be properly recognized and relationship among them needs to be enhanced. To increase hospital staff's motivation and to improve quality of health care services, the Hospital board and managers must take in to account health workers motivation with non-financial incentives like on job training, facilitating the condition to upgrade their educational level. The management should avail themselves of the detail knowledge of employee's need and different areas of motivation which will help to improve the quality of service within the organization. The management should strive to alleviate the problem that minimizes the worker's motivation especially on conscientiousness and burnout dimension. There is need to improve on management style by discussion of the organization work process with Hospital workers. This study doesn't have the nature of in-depth description which could have been achieved if qualitative methods were employed. Therefore, findings of this study will be applicable to the study area and to other similar settings with cautious generalization. Hospital managers must recognize the importance of work motivation in reaching sector and organization goals, and they must understand the links between their current policies and worker motivation.

### 5.3. Competing Interests

There is no competing interest with the presented data as external data collectors collected it. There was not financial interest between the funder and the research area community and us. We have no any form of competing financial and non-financial interest between ourselves.

### 5.4. Authors' Contributions

The four authors have made significant contribution in the proposal development, defending for fund obtaining, data collection and data analysis and manuscript preparation process of this work.

### 5.5. Acknowledgments

We are grateful to Jimma University (JU) for the financial support. Our thanks go to heads of Nigist Eleni Mohammed memorial hospital for their permission to conduct the study. We also acknowledge our study participants for providing the necessary information and the data collectors for collecting the data carefully.

## **6. References**

- i. Lai E. Motivation: A literature review. 2011[cited 2016 February 20]; Available from: [http://images.pearsonassessments.com/images/tmrs/Motivation\\_Review\\_final.pdf](http://images.pearsonassessments.com/images/tmrs/Motivation_Review_final.pdf). 2011.
- ii. Bertone M, Messen B. Studying the link between institutions and health system performance: a framework and an illustration with the analysis of two performance-based financing schemes in Burundi. *Health Policy and Planning*. 2013;28:847-57.
- iii. Mowday R. Strategies for adapting to high rate of employee turnover. *Human resource management*. *International Journal of Nursing Studies*. 2006;39:867-81.
- iv. Franco L, Bennett S. Determinants and consequences of health worker motivation in hospitals. *Georgian social science and medicine*. 2004;58(2):867-81.
- v. WHO. The world health report. 2006.
- vi. UN. UN. Africa and the Millennium Development Goal 2007.
- vii. FMOHE. Ethiopian Hospital Reform Implementation Guideline FMOH, editor2010.
- viii. JacobiN. Extrinsic Factors Affecting Health Worker Motivation in the Context of Task Shifting: Experiences of VCT Counselors in Ethiopia. John Hopkins university Bloomberg school of public health. 2010.
- ix. AbbasD, EhsanZ. Factors Affecting Job Motivation among Health Workers: A Study From Iran. *Global Journal of Health Science*. 2015;7(3):150-60.
- x. WilbroadM, HelenA, VirginiaB, MargaretT, DinaB. Measuring health worker's motivation rural health facilities from three districted in Zambia. *Human resource for health*. 2013;11(8):1-8.
- xi. ZemicahelW, MirkuezW, yohannesE, FitsumE. Motivation of health workers and associated factors in public hospitals of West Amhara, Northwest Ethiopia. *patient preference* 2016;10:159-69.
- xii. LunenburgF. Expectancy theory of motivation: motivating by altering expectation *International journal of management, Business administration*. 2011;15(1):1-6.
- xiii. julieM. A word on standardization in longitudinal studies2015; 6.

- xiv. AyyashH, AljeeshY. Nurses' Motivation and their Performance at European Gaza Hospital in Gaza Strip. [http://www.walazharedups/journal\\_123/natural\\_Sciences.asp](http://www.walazharedups/journal_123/natural_Sciences.asp). Journal of Al Azhar University-Gaza (Natural Sciences). 2011;13:55-68. Epub 13/02/2011.
- xv. AlshllahS. Job satisfaction and motivation: how do we inspire employees? pubmed. 2008;26(2).
- xvi. ChengPL, RobertsonRW. not for bread alone-motivation among hospital employees in Singapore. public organize REv.6(2).
- xvii. P M, L G, D B. Contextual influence on health worker motivation in district hospitals in Kenya. Implementation science. 2009;4(1):43.
- xviii. MillerF, BennetS, KanferR, StubblebineP. Determinants and consequences of health worker motivation in hospitals in Jordan and Georgia. social science and health. 2004;58:343-55.
- xix. HalaA, YousefA. Nurses' Motivation and their Performance at European Gaza Hospital in Gaza Strip. [http://www.walazharedups/journal\\_123/natural\\_Sciences.asp](http://www.walazharedups/journal_123/natural_Sciences.asp). 2011;13:55-68.
- xx. Tesfaye D, Waju B, Negalign B. Motivation and Factors Affecting It among Health Professionals in the Public Hospitals, Central Ethiopia. Ethiopian journal of health science. 2015;25(3):231-40.
- xxi. Abbas D, Ehsan Z. Factors Affecting Job Motivation among Health Workers: A Study From Iran. Global Journal of Health Science. 2015;7(3):153-60.
- xxii. Shah M, Al-Enezi N, Chowdhury R, &, Shah N. Correlates of job satisfaction among health care professionals in Kuwait. Medical Principles and Practice. 2001;10:156-62.
- xxiii. Agyepog I, Anafi P. health worker satisfaction and motivation in the public sector in Ghana. International journal of health planning and management. 2004;19:319-39.
- xxiv. Willis-shattuck M, Bidwell P, Thomas S, Wynes L. Motivation and retention of health workers in developing countries:A systematic review. BMC health service research. 2008;8(1):247-58.