

## Research Article

# Motivational Status and Associated Factors among Jimma University Specialized Hospital Health Professional, South West Ethiopia

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## ABSTRACT

**Background:** Health professions motivation can potentially affect the provision of health services. The health workforce is motivated only when the organization and the individual goals are aligned. Low morale among the workforce can undermine the quality of service provision and drive workers away from the profession. Jimma University Medical Center is area of teaching beside provision of health service with a number of health professionals and currently motivational of staffs are not systematically studied in which it is a vital for quality of care and performance improvement with interested workforces.

**Objective:** The objective of this study is to assess status and contributing factors to the current state of motivation of health professionals practicing in Jimma University Medical Center.

**Methods:** Institutional based cross sectional study was employed. The study was included all health professionals that available during data collection. Data collected by using self-administered questionnaire, semi-structured interview and analyzed using SPSS version 20. Items were dichotomized, binary and multiple logistic regressions were used. P-value of less than 0.05 was considered as statistically significance in multivariate.

**Result:** A total 403 were participated in study, which account 88.8% response rate. The percentage of health professionals motivated in Jimma University Medical Center was 25.1%. The Job satisfied OR=7.64 (3.49, 16.72), presence of good interpersonal relationship between service providers and management at workplace OR=4.62(1.98, 10.75) and Presence of regular training opportunities in the facility OR=2.23 (1.01, 4.96) were the most predominant motivational factors. Work responsibility and achievement were the first and the second motivator's factor ranked by health professionals respectively

**Conclusion and recommendation:** Motivation of health professionals was very low. Interpersonal relation with providers and administrators, regularly presence of training opportunities and job-satisfied level were predominant motivational factors. Work responsibility and achievement were highest motivators of health professionals' motivation. Hospital administrators should give attention for those factors identified for further improvement.

**Keywords:** Jimma university medical center; Motivation; Health professionals

## Introduction

The delivery of health services is complex and often demanding. Health professionals face high levels of responsibility; high expectations from patients, communities and employer organizations; and sometimes competing clinical and organizational challenges to be managed. This requires a range of skills, from the interpersonal to the highly technical and specialist. At the same time, a health professional are the health sector's key resource as well as absorbs 40% to 90% of health service budgets [1].

Many of governments are trying to improve the functioning of their health care system by introducing changes in resource allocation, better management and changes in the role of the

government, such as more responsibility at lower levels through decentralization and a prerequisite of a well-functioning system is a well-motivated workforce [2].

Motivation is the processes that account for an individual's intensity, direction and persistence of effort toward attaining a goal [3]. Health workers motivation can potentially affect the provision of health services. Low morale among the workforce can undermine the quality of service provision and drive workers away from the profession. While the presence of high-quality, motivated staff is a key aspect of health system performance, it is also one of the most difficult factors to measure [4].

Staff motivation and quality of health care service are positive relationships in quality improvement and patient safety [5]. Motivation of staffs can be affected at different

levels individual, organizational and societal. Individuals are driven by their own desires and moral beliefs [6]. Individual motivations may be internal or intrinsic motivation (activated from the inside) or they may external or extrinsic (activated from the outside) motivation, which is nurtured from the outside and sensible starting point is to understand and address first and foremost the demotivating factors, which may undermine employee motivation [6,7].

Non-financial incentives, such as transportation to work, career development prospects and resource availability at the workplace, are important sources of motivation. These incentives could be prioritized for funding through allocated sums from internally generated funds (IGFs) of health facilities [6]. The formulation of a structured personnel management strategy could have a positive impact on the quality of the services provided. Health care delivery is highly labor-intensive, and service quality, efficiency and equity are all directly related to providers' willingness to apply themselves to their tasks. Low motivation leads to the insufficient translation of knowledge, the underutilization of available resources and weak health system performance [8,9].

Health care workers all over the world are facing difficult challenges, such as rising public expectation, better performance in quality with fewer resources, shortage of health professionals in certain disciplines and underemployment of trained health care professionals [1,6]. The knowledge and skills-base needed to perform effectively in their chosen fields of endeavor continues to grow and change rapidly. Health care personnel will continue in the workforce for many years, while the information that they acquired during their education may rapidly become obsolete, on the other hand health institutions and managers confronted with these realities [10].

The pessimistic and negative thoughts and feeling arising from the work place disturb the social and family structure of a person who carries all these problems home. It a continual process and needs to be sustained and developed as individual and organizational factors change over time. The doctors' and staff's feelings toward their work have a significant influence on their personal lives as well as on the quality of life for the patients and the image of the workplace [11]. The study done in Africa revealed that many healthcare workers are demotivated and frustrated due to unable to satisfy their professional conscience and impeded in pursuing their vocation as a result of lack of means and supplies, inadequately or inappropriately applied human resources management tools. This may adversely affect the motivation of health workers [12].

In Kampala Uganda Makerere, study revealed that number of factors that can be affect health care service provision. Compromised quality assurance service by overcrowding patient of flow, in adequate infection control measure, lack of update information, lack of recognition, low reflection of professionalism, resource constraint and insufficient specialization services are the main challenges to keep quality assurance and patient safety [13]. In other hand, poor implementation of performance management has impact on

employment increase turn over in by leave physically (quit) or withdraw psychologically (minimize their effort until they are able to find a job elsewhere) and decrease motivation to perform by feeling that superior performance is not translated into meaningful tangible or intangible rewards [14].

In Ethiopia, still there is a shortage of health professionals in different disciplines. This has a great deal of undesirable impact on efficiency and effectiveness of the health of the delivery services. High turnover is one of the major factors contributing to shortage of health workers [15]. Health professionals are human resource element in the healthcare organizations, and have a great impact on the quality of care and patient outcomes [16,17].

Sometime the organizations losses experienced senior professionals by misdiagnosing their employers' needs and expectation. According to document reviewed from JUMC human resource development, Nursing Director Office of JUMC and CPHMS administrative office, from 2013 to first quarter of 2014, 50 nurses 5 doctors and 10 other health professionals from hospitals and 14 senior doctors from JU totally around 79 health professionals were quitted from their work for unknown reasons [18,19]. (Personal Communication/work paper reviewed).

Therefore, the present study is will intended to give some information on the workers current status of motivation and contributing factors in specific to study area for the purpose of exploring areas for sustainable and attainable improvement.

## **A Conceptual Framework for Health Professionals Motivation**

Existing literature identifies a variety of factors that influence health worker motivation on the individual, institutional, and community levels. Figure 1 provides a conceptual framework that articulates the relationships among these factors. The framework is created by referring different literature and conceptualized for this study.

Influences on health worker motivation can be roughly divided into intrinsic factors, or internal characteristics of the individual worker, and extrinsic factors, or external characteristics of the institution, health system or community (Figure 1).

## **Significance of the Study**

This study has some contribution for the health facilities administrator to aware their employees' motivation status and factors would have affect health professionals motivation. Thus, results of this study could be useful, especially in the JUMC context where healthcare human resource challenges continue to hamper provision of quality services and again it can increase transparency between health care providers and managers toward common goal.

This study aims to generate information that could be useful for people working JUMC professionals and particularly for those interested in human resource management issues in hospital.

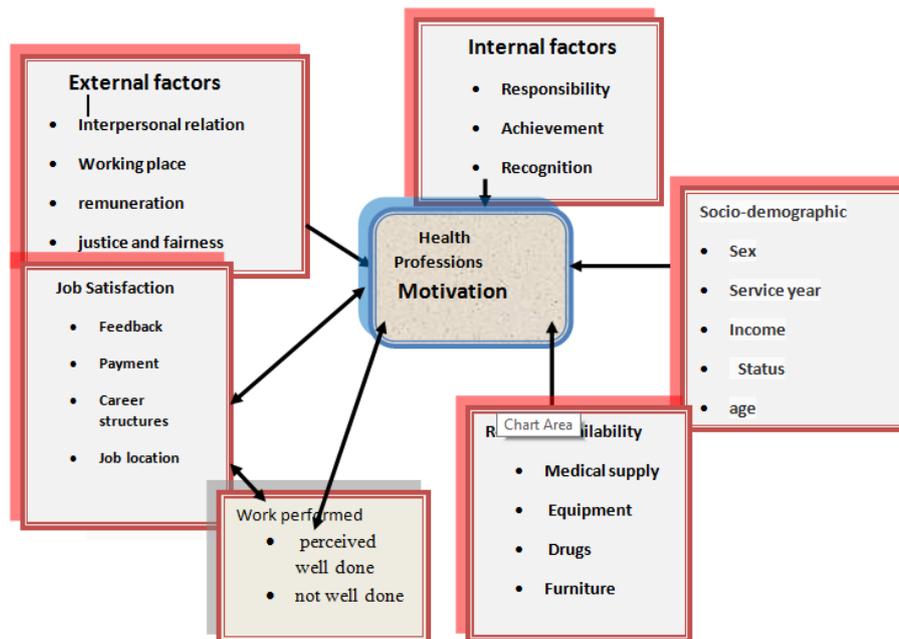


Figure 1: Conceptual framework for factors affecting health worker motivation of JUMC [21,22].

## Objective

### General objective

To assess the motivation status and contributing factors to the current state of motivation of health professionals in Jimma University Specialized Hospital

### Specific objective

- To measure the percentage of motivated health professionals of Jimma University Specialized Hospital
- To determine factors influencing motivation of health professionals of Jimma University Specialized Hospital
- To explore reasons of health professionals motivation perceived of Jimma university specialized hospital

## Methods and Materials

The study was conducted from March 30 to April 29, 2014 in Jimma University Medical Center. Jimma University Medical Center (JUMC) is one of the oldest public hospitals in the country. The hospital delivers health in areas like gynecology and obstetrics, surgery, pediatrics and child health, internal medicine, ophthalmology, psychiatry, dermatology, anesthesiology and dentistry.

Institutional based cross-section study design was used to determine motivational status of health professionals and associated factors. Both quantitative and qualitative study was triangulated. Self-administer structured questionnaires for quantitative survey and in-depth interviews for qualitative were used. All health professionals work for at least six months prior to data collection (physician, nurse, midwifery pharmacy, laboratory, anesthetists and others (physiotherapy, radiographers, optometry nurse) that available during data collection were taken as study participants.

Since the numbers of the health care providers are limited, maximum sample was incorporated in the study. From 567 health professions, 456 fulfilled eligible criteria. Totally 412 health professionals (403 for self-administered and nine for interview) were participated on the study.

Self-administered structured questionnaire were developed to collect data. Measure of general motivation and satisfaction tools were taken previous used study done [4]. Concept of Maslow and Herzberg motivational theory were used to develop tools. For quantitative survey have seven categories and 68 items were developed with question related to socio-demographic and others that have five scale from strongly disagree to strongly agree (strongly disagree=1, disagree=2, neutral=3, agree=4 and strongly agree=5). The construct of the questions were balanced with both positive and negative directions to prevent similar responses and negatively recoded during analysis. Open questions were developed on identified thematic area. In-depth interview were conducted to explored current experiences and perceptions on the factors affecting their performance motivation. From 18 head nurses, seven head nurses and two nurses' supervisors purposely taken for in-depth interview.

### Data quality assurance

To assure the quality of the data, motivational tools were developed based on literatures and concepts of Hertz Bergs and Maslow motivational theory used for develop tools. Pretest was performed and some questionnaire modification, order of tools was corrected based on pretest result. One day orientation was given for data collectors and supervisors. During data collection in ensuring the quality of data close supervising was done to arrange time that convenient for the respondent, phone numbers of respondents were registered on note book while questionnaire distributed to minimize non respondent rate and loss of questionnaire. Daily checking at time of collection of data by data collector and supervisors by checking for completeness immediately after data collection

was completed and any ambiguity will be clarified for the next respondents before they began. After the data collection, data were recorded, edited, and cleaned and entry to Epi-Data and exported to SPSS version 20 for analysis.

In the qualitative part of the study, training was given for moderator and note taker by principal investigator. Questions were probed for detail during data collection.

### Data analysis

Data were coded, entered and cleaned, using Epi-Data and export to SPSS version 20 statistical package for analysis. Likert-scale responses were entered as a score of 1 to 5. A score of 5 represented the statement "strongly agree" for positively-worded questions, while negative questions were re-coded in the opposite direction, so that a score of 5 represented "strongly disagree". Each item described response to individual questions were examined by means of frequency distributions, mean and median scores and examining whether the direction of response was as anticipated and consistent with responses within and across constructs. Cronbach's alpha used check for scale reliability of the Likert scale items for each categories and Cronbach's alpha greater than 0.7 for all categories except physical working place that was (0.65)

Responses to individual questions were examined; Logistic regression analysis was used to see significance of association between dependent and independent variables. Bivariate and Multivariate analysis were done for variables after the five scales Likert scale dichotomized according to Table 1. P-value<0.25 in bivariate was exported multivariate for final model. In order to test for the associations of the outcome variable with the independent variables multiple logistic regressions were applied accordingly. P-value, confidence interval and odds ratio were computed and interpreted. P-value of less than 0.05 was considered as statistical significance. Results were summarized and presented by tables, charts, graphs and in narration form. Qualitative data results was combined and subsequently narrated with quantitative result on with identified categories of thematic area identified.

### Ethical consideration

The ethical approval and clearance was obtained from Jimma University Ethical Clearance Committee and cooperation letter written to the hospital from health service management and Permission for conducting the study was first obtained from CEO. The study subjects were informed about risk and benefits and necessary explanation about the purpose of the study and its procedure, assurance of confidentiality, and the right not to participate were assured and finally verbal consent and written consents were obtained from each study participant for self-administers and interviews respectively. In addition, copy of consent sheet was given for key informant interviewee that willing to participate on the study.

## Results

### Socio-demographic characteristics

Among 567 of health professions in Jimma University

Medical Center, 456 of them fulfilled the eligibility criteria and 456 questionnaires were distributed for health professions active during data collection, 403 were correctly filled and returned giving a response rate of 88.8%. From the remaining 53 questionnaires, four were incomplete and 49 were non-respondents.

From total study participants (N=403), 252 (62.5%) of them were males and the mean age of respondents was 28.35 (SD=+6.83). Nearly half of respondents were in age group of 25 to 29 which accounted for 194 (48.1%) and the median of respondents' years of service was 2 years. More than half of participants 241 (59.8%) were single and 152 (37.7%) were married. Regarding religion of the respondents, 173 (42.9%) were orthodox and 130 (32.3%) were protestants. From the total responded to ethnicity (n=384), majority of them (224, 58.3%) were Oromo followed by Amhara 72 (18.8%).

The most frequent group of workers were getting their month salary in ranges 1233-2249 Ethiopian birr which accounts for 185 (45.9%) followed by a group of workers who get from 2250 to 3413 (160, 39.7%) Ethiopian birr. Majority of respondents 243 (60.3%) live in rented house. About a quarter of the respondents, 99 (24.6%) live in private house and 50 (12.4%) were living in government house. Regarding the faculty status of the respondents, 348 (86.4%) were not academic; whereas 55 (13.6%) were found to be academic staffs.

From the total (n=403) of health professionals, nurses were dominant accounting for 254 (63%) of respondents. The percentage of staff with first degree was nearly equal to the percentage of staff holding diploma, 179 (44.4%) and 176(43.7%), respectively.

### Health professionals' motivation

The percentage of health professions motivated was 25.1%. This motivation percentage vary between professions categories from least 6.7% to highest 33.3% in anesthetists and others professionals (radiographers, optometric nurse, dentistry and physiotherapist), respectively. Moreover, percentages of motivated to work, proud to be working for the facility, glad to being work in the present facility than other facilities and inspired by facility were listed in the Table 1.

### Health professional motivators

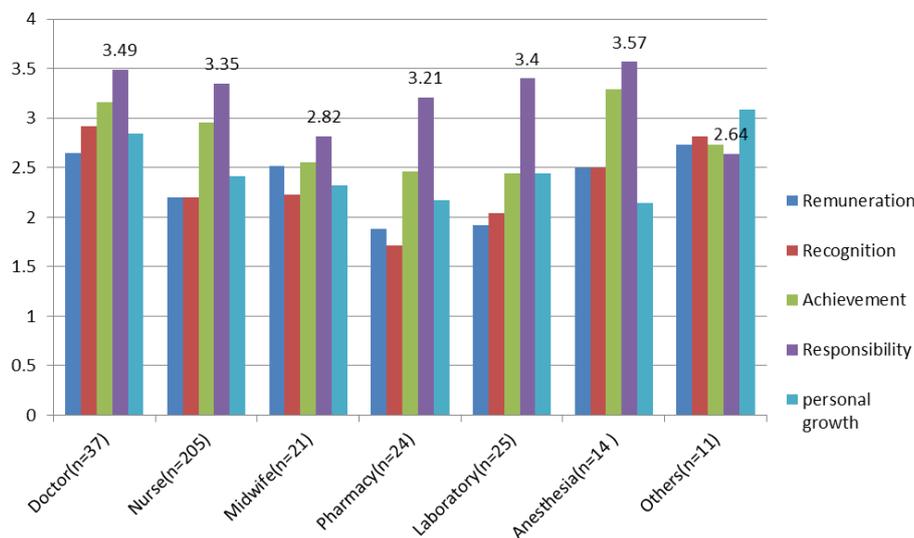
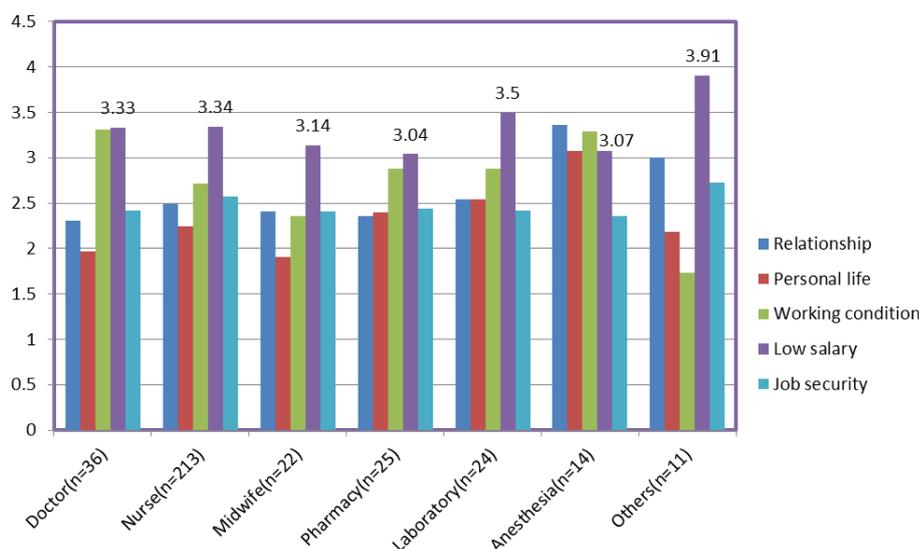
Individual self-reported show that there was different motivation toward the same thing with different individual. Study participants were asked to rank the motivators that motivate them than the other for (N=337) respondents. According to this the mean score of JUMC HPs were calculated based on ranked scale of their self-reported. As indicated in Figure 1, the highest ranked that motivate health professionals was *job responsibility* (3.31), this was significantly higher than all the others both for the overall professions and by professional subgroup except others (radiographers, optometry nurse and physiotherapy) which payment as highest marked (Figure 2).

### Demotivators

From total study participants (N=345) of professionals

**Table 1:** Depicted health professionals motivation within professional categories of JUMC April, 2014.

Categories	Score	Doctor (n=42)	Nurse (n=25)	Midwife (n=25)	Pharmacy (n=28)	Laboratory (n=27)	Anesthesia (n=15)	Others (n=12)	Total (N=403)
General motivation	Not motivated	76.2%	74.8%	68%	71.4%	77.8%	93.3%	66.7%	74.9%
	Motivated	23.8%	25.2%	32%	28.6%	22.2%	6.7%	33.3%	25.1%
I feel motivated to work hard	≤3	73.8%	68.1%	44%	82.1%	70.4%	86.7%	75%	69.2%
	>3	26.2%	31.9%	56%	17.9%	29.6%	13.3%	25%	30.8%
I proud to be working for this facility	≤3	81%	74.4%	88%	64.3%	70.4%	60%	33.3%	73.2%
	>3	19%	25.6%	12%	35.7%	29.6%	40%	66.7%	26.8%
I am glad to work here than other facilities	≤3	81%	78%	84%	82.1%	88.9%	93.3%	66.7%	79.9%
	>3	19%	22%	16%	17.9%	11.1%	6.7%	33.3%	20.1%
Organization inspire me to do	≤3	92.9%	79.1%	84%	89.3%	96.3%	93.3%	83.3%	83.4%
	>3	7.1%	20.9%	16%	10.7%	3.7%	6.7%	16.7%	16.6%


**Figure 2:** Motivators and mean score of HPs of JUMC that motivate them among different professionals' categories, April 2014.

**Figure 3:** Demotivators factors and its magnitude in JUMC among different health professional's categories, April 2014.

were ranked demotivator factors. *Low salary payment* was the highest demotivator factors ranked by health workers with mean score (3.32) in both overall and professionals categories. The second highest ranked demotivator in overall professionals was

*working condition* mean score (2.77), but lowest demotivator among others professionals (radiographers, optometry nurse and physiotherapy). *Personal life* (2.26) was lowest ranked demotivator factors for health professions (Figure 3).

## Health professional's motivation factors

Variables that may contributed to motivation were described in the following such as professions remuneration, job satisfaction, workplace appropriateness, adequacy of medical and other supplies, presence of good interpersonal relation, perception of individuals on fairness and justice and performed of work as depicted in Table 2.

## Remuneration/rewards and motivation

Regarding to remunerations and benefits, individual self-report showed that one hundred eighteen (29.3%) got allowance and benefit. From those, 30 (71.4%) and 2 (7.1%) of them were physicians and Pharmacy in professional categories respectively. Majority of the respondents, 304 (75.4%) were perceived as there was no opportunity of training in the facility and only 99 (24.6%) of respondents said there were opportunities of training whereas 20.8% them of took training in the last twelve months. 19 (4.7%) of respondent have experience as trainers and 43 (10.7%) of them have been involved in project/program activities in additional to their regular duty. 94 (23.3%) and 118 (29.3%) of study participants believed that they were timely promoted and get career development, respectively. While three quarters of the respondents said that they had not been promoted timely.

Similarly, information obtained from a key informant said that "Within my experience I didn't hear...no appreciation, rarely training and these trainings were not proportional to the number of staffs. (KII2 head nurse, age=25). Another KII also elaborated "No incentives, no training, if there is a training it did not considered the number of workers. As this working area is risky, there must be incentive." (K14 head nurse, age=24)

## Workplace/working environment

The overall comfortably of working place of JUMC was 12.7% and range from least 7.1% to highest 36.4% anesthesia

and others (radiographers, optometry nurse, and physiotherapy) within professionals, respectively (Table 2).

For the question posted to them on the 'security issue at working place and Jimma town, more than half of respondents 220 (24.3%+30.3%=54.6%) were strongly disagreed or disagreed on the presence of security and 144 (10.7%+25%=35.7%) of respondents strongly disagreed or disagreed on presence security communities/Jimma town. Similarly, one of doctor adds his point to toward workplace said '...the security of hospital is very frustrating as there are no any activities seen to make the professionals as well as patients secured. Example, There was a patient and a nurse stabbed while being treated and giving treatment in the hospital.' (Doctor, Age=30).

In similar way, three forth of respondents (40%+36%=76%) agreed and strongly agreed that working environment of the hospital are stressful and overcrowded. More than half respondents of respondents (52.4%) disagree or strongly disagree for statement 'attachment of students to the wards are not interfere my work'. Information obtained from via in-depth interview in line with this quantitative data. Most of key informants were agreed that there was shortage of duty rooms, equipments, drugs and overcrowded. "As you can see this ward has nothing, that make us uncomfortable because ward has one emergency case in its corner and roads are passed through it that make ward overcrowded...all this things make this ward stressful and overcrowded. ...when we see the rooms, it is too narrow and no enough chairs and tables even sometimes we use attendant's chair. As you can see the nurse offices look like a store and it used as an alternative patient's examination room... but regarding the security issue, no one is complained about it and still I didn't hear someone that leaves the workplace because of the security of the town and the compound." (K12, Head nurse, age=25).

"We have duty room and station that is comfortable but at this time the supply of sugar is interrupted and makes us sad because as you know staffs of this ward is not allowed to move

**Table 2:** Depicted JUMC health professions motivational factors in different professions, April, 2014.

Categories	Variables	Doctor (n=42)	Nurse (n=254)	Midwife (n=25)	Pharmacy (n=28)	Laboratory (n=27)	Anesthesia (n=15)	Others (n=12)	Total (N=403)
<b>Job Satisfaction</b>	Unsatisfied	71.8%	78.9%	60%	70.4%	81.5%	73.3%	66.7%	76%
	Satisfied	28.2%	21.1%	40%	29.6%	18.5%	26.7%	33.3%	24%
<b>Work place</b>	Not appropriate	90%	87.1%	92%	81.5%	92.6%	92.9%	63.6%	87.3%
	Appropriate place	10%	12.9%	8%	18.5%	7.4%	7.1%	36.4%	12.7%
<b>Medical equipments, drugs and supplies</b>	Not adequate	95.2%	82.3%	96%	78.6%	74.1%	100%	75%	84.1%
	Adequate	4.8%	17.7%	4%	21.4%	25.9%		25%	15.9%
<b>Interpersonal relationship</b>	Not good relation	38.1%	41.7%	48%	42.9%	44.4%	33.3%	58.3%	42.2%
	Good relation	61.9%	58.3%	52%	57.1%	55.6%	66.7%	41.7%	57.8%
<b>Justice and Fairness</b>	Unfair	61.9%	71.7%	84%	64.3%	70.4%	86.7%	75%	71.5%
	Fairness	38.1%	28.3%	16%	35.7%	29.6%	13.3%	25%	28.5%
<b>Work performed perception</b>	Not well done	92.9%	72%	72%	85.7%	81.5%	100%	83.3%	77.2%
	Well done	7.1%	28%	28%	14.3%	18.5%		16.7%	22.8%

to other area and take tea and coffee, 24 h stands by.” (Head nurse KI5, age=47).

### Medical equipments, supply, materials and others resources

Supplement of medical equipments and others resources are asked health professionals of JUSH that have nine items on availability, consistency, quality and any effect on performance of an individual's due to inadequate of this resource. Thus,

from the total study participants there were only 15.9% of respondents perceived that medical equipments, drugs and medical supplies were adequately available while majority of them disagree especially for all anesthetics and near all for midwife and physicians as indicated on Table 4. Interview with nurse “*Medical Supplies have been given but the supplies were not adequate and consistent provided. Because of supply is not adequate workers conflict with each other which created demotivation among workers.*” (KI8 Head nurse, age=40).

**Table 3.** Showed description of job satisfaction in each items of health professionals of JUMC, April, 2014.

S. No.	Satisfaction measure items	Strongly disagree	Disagreed	Neutral	Agreed	Strongly Agreed
1	Satisfied with working environment/place	27.3	40.7	17.1	11.9	3
2	Satisfied with job location/area	18.4	29.8	21.3	27	3.5
3	Satisfied with working hours or shift	17.9	23.3	19.4	33.3	6.2
4	Satisfied with salary structures	43.2	35.7	11.2	7.2	2.7
5	Satisfied with duty payment	42.2	27.8	14.4	13.4	2.2
6	I am satisfied with work responsibility	14.4	12.9	16.9	41.2	14.6
7	Satisfied with work performance appraisal	19.1	23.3	27.8	24.6	5.2
8	Responsibility give satisfaction achievement	8.9	18.1	24.6	39.	9.4
9	Satisfied with transportation service	19.6	33.5	21.8	21.6	3.5
10	I'm not satisfied with my colleagues	16.9	35.7	27	17.4	3
11	Satisfied with my super, boss/dept heads	20.8	25.6	28.5	20.3	4.7
12	Over all I'm satisfied with my job	13.4	30.5	25.3	25.1	5.7

**Table 4:** Demographic characteristic and binary logistic regressions of HPs motivation, April 2014.

Characters	Variables	Rate of Motivated	P value in bivariate	P value in multivariate
<b>Sex</b>	Male	23%		
	Female	28.5%	0.221*	0.276
<b>Age group in years</b>	<=24	25.7%	0.860	-
	25-29	20.6%	0.048*	0.279
	30-35	25.5%	0.942	-
	36-40	33.3%	0.410	-
	>=41	48.1%	0.006*	0.284
<b>Service years</b>	<2 year	21.6%	0.029*	-
	2-5 years	24.7%	0.746	-
	6-10 year	26.3%	0.708	-
	above 11 years	44.4%	0.006*	0.473
<b>Monthly salary</b>	1233-2249	28.1%	0.194*	0.533
	2250-3413	23.8%	0.622	-
	3413-4604	17.4%	0.386	-
	4605-5443	8.3%	0.069*	0.207
<b>Profession</b>	above 5443	45.5%	0.126*	0.082
	Doctor	23.8%	0.843	-
	Nurse	25.2%	0.935	-
	Midwife	32.0%	0.411	-
	Pharmacy	28.6%	0.657	-
	Laboratory	22.2%	0.725	-
<b>Academic staff</b>	Anesthesia	6.7%	0.129*	0.213
	Others*	33.3%	0.505	-
	Yes	23.6%		
	No	25.3%	0.793	-

\*Variable that candidates for final model multiple logistic regression ( $p \leq 0.25$ )

When we see each items, from total of respondents, 319 (39.2%+40%=79.2%) were strongly disagreed or disagreed on a adequacy of medical equipments and again almost similar percentage of health professionals (76.4%) were strongly disagreed or agreed for the statement said 'there are adequate personal protective equipments that everyone can use when they want it for infection prevention'. Data from interview also revealed that "...there is scarcity of medicines at one time patients receive medicines for three months but due to scarcity of the medicine we give to them for one month...this is create defaulter rate increase and they came back by relapsing case these results in work load and overcrowded on staffs." (Head nurse KI1, age=37)

One hundred seventh seven (43.9%) of respondents strongly agreed or agreed that standard of treatment protocol compromised due to inadequate of resources but 147 (11.7%+25.1%=36.7%) of them strongly disagreed or disagreed for this statement and again majority of respondents 264 (27.7%+38%=65.7%) were strongly agreed or agreed delay have seen for patients services due to scarcity of resources. From interviews "*Due to absence of this medicine patients exposed to unwanted excess cost, difficult for staffs to treat the patient without the medicine this affect the motivation of the health professionals.*" (Head nurse KI3, age=24)

### Interpersonal relationship

The overall good interpersonal relationship among JUSH was 57.8% and range from least 41.7% to highest 66.7% others (radiographers, optometry nurse, dentistry and physiotherapy) and anesthesia within professionals respectively (Table 4). When we see for each items, majority of respondents were reported having a good working relationship with their colleagues (35%+48.9%=83.9%). One of key informant said "*we have smooth relationship, we have an agreement and done the work in collaboration.*" (KI1 head nurse, age=37)

More than half of respondents (17.6%+34.5%=52.1%) felt as no good communications channels between in different hospital workers and managements. 96 (4.2%+19.6%=23.8%) professions were indicated that there was a good channel communication between professionals and management. 190 (20.8%+26.3%=47.1%) of respondents reported they were not encouraged by feedback/comments given by their superiors. In others way 124 (4%+26.8%=30.8%) respondents were encouraged by their superiors comments/feedback and more than half of respondents (57.6%) were strongly disagreed or disagreed working was recognized or thanked as they performed their tasks whereas 30.6% of them were got recognition or thanks from their superiors. From a total study participants 156 (38.7%) of them were got immediate response from their superiors for any enquiry they asked or consulted and almost the same numbers of respondents 155 (38.5%) were strongly disagreed or disagreed for immediate response for consultation of seniors or other enquiry related to their working condition and 22.8% were neutral to this. "*The administrators have low relationship with lower level workers except nursing director. If it continues like this it create problem on the behavior of workers and de-motivate them.*" (Supervisor KI7, age=26)

### Justice and fairness

Mean percentage scored above mean of HPs for Justice and fairness was 28.5% and lowest in anesthesia 13.3% where majority of them perceived not fair was there. 227 (56.3%) of respondents were strongly disagreed or disagreed for fair distribution of resources for staffs and 20.9% strongly agreed or agreed while 24.3% of them were neutral and almost similar respondents (58.6%) strongly disagreed or disagreed on staffs have equal chance to participate on the some benefits that are equally concerned to get it where as 20.6% of respondent strongly agreed or agreed. 197 (48.9%) respondents were strongly disagreed or disagreed for no fair and flexible rotation and 26.5% of them strongly agreed or agreed no fair and flexible rotation of individual assigning duty by his/her boss.

In general respondent self-reported show that around half of respondents 48.6% were strongly disagreed or disagreed the supervisors/department heads/boss were respective and transparent to their subordinate.

### Health professionals perceived on work performed

From total study participants of JUMC was 22.8% perceived that work was well performed and this performance lowest in physician 7.1% highest 28% among nurses where majority of them perceived not well done (Table 2). From total study participants more than half of respondents were strongly disagreed or disagreed for all items posted to them on work performance of hospital concerning infection prevention and patients safety, maintained quality of healthcare, all work go as standard and protocol, presence of good management and administration with clear job description, health professionals felt confident and motivated and resources of hospital wisely utilized.

### Satisfaction

The overall job satisfaction of health professions of JUSH was 24%. Within professionals categories satisfaction rages from 18.5% to 40% in laboratory and midwife, respectively. The details described in Table 3.

### Planned/future perception of Individuals

From total study participants 101 (25.1%) of them were perceived that there were motivating factors implemented in this hospital while as 184 (45.7%) of them were not. Majority of respondents were perceived that being staff of Jimma University were advantageous in education opportunities, training and different types of advantage 44.4%, 6.5% & 12%, respectively and 20% of them believed that there was no advantageous. 278 (69%) of respondents were said that there was a work overload in their working unit and 25.1% were not.

Among total study participants that responded 376 (93.3%), 68.9% were perceived that they have planned to change their working institutions and in short period.

### Binary logistic regression of motivation

This is shown in Table 4.

**Table 5:** Depicted bivariate and multivariate logistic regression of JUMC health professional's motivation and its associated factors, April 2014.

Categories	Variables	%	Bivariate		Multivariate	
			P value	COR (95% CI)	P value	AOR (95%CI)
<b>Job Satisfaction</b>	Unsatisfied	76	0.000	16.4 (9.3, 28.8)	0.000*	7.64 (3.49, 16.72)
	Satisfied	24				
<b>Workplace</b>	not comfortable	87.3	0.000	5.32 (2.8, 9.9)	0.258	1.745 (0.67, 4.58)
	Comfortable	12.7				
<b>Medical equipments, drugs and supplies</b>	not adequate	84.1	0.000	5.89 (3.3, 0.4)	0.069	2.22 (0.94, 5.67)
	Adequate	15.9				
<b>Interpersonal relationship</b>	not good	42.2	0.000	5.53 (3.1, 9.9)	0.000*	4.62 (1.98, 10.75)
	good	57.8				
<b>Justice and Fairness</b>	Unfair	71.5	0.000	2.99 (1.9, 4.8)	0.892	0.947 (0.43, 2.08)
	Fairness	28.5				
<b>Work performed perception</b>	Not well done	77.2	0.000	9.88 (5.8, 16.8)	0.062	2.18 (0.96, 4.95)
	Well done	22.8				
<b>Presence of allowance</b>	Yes	29.3	0.106	1.5 (0.9, 2.4)	0.216	1.59 (0.76, 3.33)
	No	70.7				
<b>Presence training opportunities</b>	Yes	24.6	0.030	1.74 (1.1, 2.9)	0.049*	2.23 (1.01, 4.96)
	No	75.4				
<b>Timely promoted education &amp; others</b>	Yes	23.3	0.044	1.68 (1, 2.8)	0.330	0.658 (0.28, 1.53)
	No	76.7				
<b>Career development</b>	Yes	29.3	0.062	1.578 (1, 0.54)	0.423	1.374 (0.63, 2.99)
	No	70.7				
<b>Involved in project</b>	Yes	10.7	0.055	1.92 (1, 3.7)	0.884	0.923 (0.32, 2.69)
	No	89.3				
<b>Heavy workload</b>	Yes	73.4	0.006	0.50 (0.30, 0.82)	0.979	0.99 (0.46, 2.15)
	No	26.6				
<b>Change working institution</b>	Yes	68.9	0.001	0.44 (.27, 0.72)	0.908	0.96 (0.44, 2.09)
	No	31.1				
<b>Change profession</b>	Yes	54.7	0.235	0.75 (0.47, 0.20)	0.691	1.16 (0.56, 2.43)
	No	45.3				

Variables that are \*significant at  $p < 0.05$  in multivariate

### Final model motivation and associated factors

The binary logistic regression was showed that there was no significant association between socio-demographic characteristic, professional categories and health professional's motivation (Table 5).

The final model of multiple logistic regression depicted that job satisfaction, good interpersonal relationship, continues presence of training opportunities in the facility independently affect health professions motivation of Jimma University Medical Center.

The Overall job satisfying of study area health professional to working environment, salary structures and work responsibility in the facility were AOR=7.64, CI (3.49, 16.72) times more likelihood to motivated than non-satisfied/dissatisfied of health professionals independent of the others and Presence of good interpersonal relationship between work providers and management at workplace AOR=4.62 (1.98, 10.75) times more likelihood motivated health professions than for that not perceived not good interpersonal relationship at workplace. Regularly presence of training opportunities in health facility AOR=2.23 (1.01, 4.96) times likelihood increased the

motivation of health professionals. Moreover, others like work performance, appropriate workplace, justice and fairness and medical supplies and equipments were not significantly associated logistic regressions.

### Discussion

Health workers motivation is the back bone for deserve quality of health service delivery. The general motivation level of JUMC health profession was 25.1%. This job satisfaction study area was 24%. This result less than the study done before five years back on the same area which was 41.4% [17]. This difference may due to time difference, economic inflation and no any intervention done for improvement of job satisfaction.

Socio-demographic characteristics, age, sex and monthly salary of health professionals of current study has no significant association with overall motivation of health professionals. This finding was inconsistent the studies done in Nepal which revealed that health workers of age 40 years and above were more motivated than the health workers of less than 40 years of age (OR: 2.872; p-value: 0.000) [6]. Similarly study done in Ukraine, young health workers are more sensitive to the lack of team work in comparison with elder workers who care

mostly about low salary and poor working conditions [20] in which were not significantly observed in the current study. The study done in Gian Sagar Medical College and Hospital clearly highlights the fact that, women evaluated the job factors higher than men, which was statistically significant ( $P=0.032$ ) [11], in case of current study, percent of motivated females higher than males but no statistically significant.

Demotivation is one of cause for employee's migration and a sensible starting point is to understand and address first and foremost the demotivating factors, which may undermine employees motivation [7]. Study done in Africa revealed that causes of hard brain drain of health workers were poor prospects of further training, poor remuneration, lack of promotional prospects, inadequate equipments and other supplies at health facilities [23-25]. In Cyprus public general hospital the main discouraging factors among health profession were related to low salaries and difficult working conditions [3] it in line with current study that majority of respondents ( $n=376$ ), 68.9% of them do have plan to change their working institution which contributed for increase of turnover rate and even though remuneration was the least ranked motivators in the facility, low salary payment was of the highest demotivator factors ranked as first by professionals and this result was consistent with the study done in Ethiopia revealed that 74.6% of medical doctors, 62.5% of pharmacists, 50.6% of nurses and 34.2% of laboratory technicians were not satisfied with their job because of the low remuneration [24].

Regarding to medical supplies and equipments, study showed that Medical supplies and equipments in JUMC were not adequately available where only 15.9% of health professions indicated to on its adequacy. These figure the lowest in physician and anesthesia and again as interviewers reported there was no consistent and adequate supplies of medical supplies and essential drugs. Study done in Ghana also showed that non-financial incentive such as transportation to work, career development prospects and resource availability at the workplace, are important sources of motivation for staff although perceived by staff to be dissatisfactory [6]. In the current study, availability of resources, like medical equipments and necessary drugs were the most bothers motivation for health professionals particularly physician and anesthesia in which almost of them strongly disagree for on adequacy of it.

Recognizing and appreciating workers' efforts to do a good job were apparently important influences improving motivation and may have trivial financial implications. However, respondents in some settings argued that although the hospital management was in a position of influence and could improve their motivation to work, they did not take up this role [22]. The current study revealed that interpersonal relation was one of the predominant health professionals motivation factors among the current study facility in which it influence health workers motivation by  $OR=4.62$ ,  $CI$  of (1.98, 10.75) times more likelihood to motivate for good management and administration perceived to there in comparing to no good interaction between providers/staffs and administrators.

## Limitation of the Study

- The weakness of the study individual response may prone to social desirability bias
- And the other weakness is concerned reliability test of work place in which of motivation measures workplace dimension presented insufficient internal consistency (less than 0.7).

## Conclusion

Many health professionals at in all discipline of hospital were not motivated with the tasks they performed due to a variety of factors. The finding of study showed that health professions motivation were very low in both overall and sub professionals categories. There was only quarter of health professionals motivated and satisfied to their job.

The overall satisfying to workplace, salary structures, work responsibility of health professionals in the facility, seven times more likely to motivate than non-satisfied. And good interpersonal relationship at workplace four times likely motivated than for that perceived not good interpersonal relationship among health professionals whereas regularly presence of training opportunities doubled level of health professionals' motivation. Socio demographic characteristic like age, services years, professions, income of respondents, and others would not associated with HPs motivation. However, older age of respondent more their motivation increase but not statistically significant.

Health professionals of the study area indicated Work responsibility was more motivated them than other motivators. Thus majority of them ranked it as first motivator. Achievement was the second predominant factors to motivate whereas perceived low salary payment and working condition were most de-motivating factors for HPs the study area and personal life less demotivators.

## Recommendation

Based on the study finding the following recommendations are proposed.

- Most of study participants were motivated by working responsibility and, thus the hospital management needs to set clear performance goals and job descriptions for workers at all levels.
- As low salary, payment was most demotivator's factors in study area. So that Jimma University should consider regularly way of increase remuneration for employees.
- The hospital at all management level should consider Interpersonal relation and there is need to initiate mechanisms to improve communication amongst workers in different units and between management and workers.
- The hospital should need to improve the availability and quality of hospital medical equipments and supplies at all levels. Essential drugs, medical, furniture's should

consistently, timely and adequately available as it decreases workers willing to perform their tasks.

- Satisfying to workplace by making conducive workplace and security issues should be secured specially around outpatient department and ward.
- Hospital should regularly arrange training opportunities for health professionals.

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