

## Work Performance and Associated Factors among Employees in Amhara National Regional State Health Bureau, Bahir Dar, Northwest Ethiopia

Shewangizaw Bereda<sup>1</sup> and Desta Debalkie<sup>2\*</sup>

<sup>1</sup>Department of Human Resource Management, Amhara Regional Health Bureau, Bahir Dar, Ethiopia

<sup>2</sup>Department of Health System Management and Health Economics, School of Public Health, College of Medicine and Health Sciences, Bahir Dar University, Bahir Dar, Ethiopia

### Abstract

**Background:** Workers performance is the foundation for the development of an organization. Creating favorable working environment is fundamental to advance workers performance. Thus, the study was intended to measure level of work performance and to identify associated factors among workers in Amhara national regional state health bureau.

**Methods:** Across-sectional study design was employed among 357 employees. Data were collected using self-administrated structured questionnaires. It was entered in to Epi-info version 3.5.1 and analyzed using SPSS. Descriptive statistics was computed to summarize the result and represented by tables. Binary logistic regression was calculated to explore the relation between the predictors and outcome variable. Multivariate logistic regression model with 95% C.I. was also computed to determine the independent association of factors with work performance.

**Results:** The level of work performance was 76.64% (76.25-77.03). The majority of the employees' performance level found to be good. Salary [AOR=3.94 (1.41, 10.99)], years of working [AOR=3.07 (1.25, 7.49)], type of working department [AOR=6.77 (2.57, 17.79)] and type of work [AOR=0.32 (0.13, 0.77)] were independently predicting level of work performance.

**Conclusion:** The level of performance was comparable to other studies in similar settings. Encouraging employees with reasonable salary based on work experience and availing conducive work structure should be given due attention by the health bureau to have better organizational performance for development.

**Keywords:** Employees; Work performance; Factors; Amhara

**Abbreviations:** ARSHB: Amhara Regional Health Bureau; AOR: Adjusted Odds Ratio; ETB: Ethiopian Birr; CI: Confidence Interval; EPiInfo: Epidemiologic Information; SPSS: Statistical Package for Social Science

### Background

Healthcare administrators explicitly reached to consensus that the globe requires more competency and production than ever since [1]. Hence, managers should play role in marshaling workers together to perform organizations goals, strategies and expectations using all resources including human power efficiently and effectively [2]. However, job performance is the commonest challenge faced by healthcare organizations which had unique, delineated organizational arrangement and work specializations [3].

In any healthcare setups, job performance is depending on a number of factors including the workplace environment that is being offered by the business owner to each worker that might bear the workers effort for work and leads to satisfaction [4]. Job satisfaction which, is the center of workplace performance and productivity in any firm, will raise the levels of the company yield and thus increases the organization's income. For example, employees whose performance was lower and affected by the workplace environments are those who always complaint on the discomfort and dissatisfaction at the work place [5]. Hence the rate of workers' satisfaction can be explained and measured in terms of three approaches (the features of a job, the view of others and the employee's personality. As previous studies witnessed, it is also obvious that training and sensitization of workers had positive impact on the performance of employees [6].

Furthermore, the factors of workplace environment give an

immense impact to the employees' either towards the negative outcomes or the positive outcomes. The job aids, supervisor support, physical workplace environment, financial incentives, skill and specialty of the employees, years of working are the factors of workplace environment in an organization that could affect the employees' performance [7-9].

Employee's performance is an achievement of assigned task, which can be increased by having a proper workplace environment. It helps in reducing the number of absenteeism and thus can increase the employees' performance which will leads to the increasing number of productivity at the workplace [10]. Research had shown that there are some positive affects when applying a proper workplace environment strategy such as the machine design, job design, environment and facilities design.

Generally, such arrangements can be considered part of the work itself, it consists of the relationship between work, tools of work and workplace. The workplace environment also could leads to the unsafe and unhealthy environment in an organization.

Employees' performance in Amhara regional state health bureau

**\*Corresponding author:** Desta Debalkie, Department of Health Service Management and Health Economics, School of Public Health, College of Medicine and Health Sciences, Bahir Dar University, Ethiopia, Tel: 25158-2-201722; E-mail: [destad2a@gmail.com](mailto:destad2a@gmail.com)

**Received** March 24, 2018; **Accepted** April 10, 2018; **Published** April 12, 2018

**Citation:** Bereda S, Debalkie D (2018) Work Performance and Associated Factors among Employees in Amhara National Regional State Health Bureau, Bahir Dar, Northwest Ethiopia. Int J Econ Manag Sci 7: 511. doi: [10.4172/2162-6359.1000511](https://doi.org/10.4172/2162-6359.1000511)

**Copyright:** © 2018 Bereda S, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

(ARSHB) is an important component to have quality healthcare service delivery. Though, the regional health bureau conducting employee's performance appraisal periodically, it was not processed, analyzed and used to determine the level of job performance for managerial action. Employees of the bureau will not be satisfied with this habit of mismanaging the appraisal system and hence, their contribution throughout employment will be reduced implicitly. Employee performance or the lack thereof has a profound impact on the performance of organizations. There was no also dependable data regarding to it that can be valuable for policy direction and decision making Therefore the study aimed to determine the level of workers performance and identify associated factors in ARSHB, Northwest Ethiopia which can be basis for other researchers and decision makers for improving work performance.

## Methods

### Study design and setting

A cross-sectional study design was conducted in ARSHB from March 15-31, 2016. ARSHB is one of the regional government organizations established in 1994 and providing health services to all people at all level of administrations in the region. It had more than 502 active health workforces including the contractual [11].

### Sample

All full time paid staffs in the bureau were included in the study, whereas, employees at period of probation, those join long term training, employees on annual leave and maternity leave, head of the Bureau and deputy heads were excluded.

The Sample size was determined for each objectives using EPI Info and the largest sample size was taken. Considering 50% proportion of job performance, 5% margin of error and 95% confidence interval, the calculated sample size with 10% non-respondent was 424. Finally, since the total eligible workers were less than the calculated sample size (424), all eligible workers (407) were studied.

### Data collection procedures

The study used self-administrated, standard and structured questionnaires adapted from literatures. The questionnaire was prepared in English and translated to the local language and then back to English for its consistency. It composed of background characteristics and work performance related factors. Pre-test was conducted before the actual data collection outside the study area.

### Data analysis

The questionnaire was entered into prepared Epi-info template and exported to SPSS for cleaning and analysis. Data cleaning was made by running frequency tables and cross tab to ensure uniformity and its completeness.

For objective one, frequencies, proportions and mean were used to present the background characteristics and work performance related factors.

For objective two, binary logistic regression was computed to identify predictor variables associated to work performance using crude odds ratio with 95% C.I.

At last, to identify the independent factors associated with work performance, variables which had p-value  $p < 0.20$  in bivariate analysis was taken to multivariate regression model. Variables in

the multivariable analysis with  $p \leq 0.05$  were considered statistically significant with 95% confidence interval.

### Operational definition

Employee's performance: is an accomplishment of assigned task. The job related activities expected of a worker and how well executed those activities (jointly planned and signed agreements by employer and employees).

Good level of performance: Employees whose score equal to or above the mean of performance appraisal result.

Job aid is something that people depends on or any mechanism to give information about the standard to support the work activity (clear job description, clear professional norms and codes of conduct, and adequate stationary and other office supplies).

Supervisor support is any assistance provided by the first line and top managers to employees in order to achieve organizational goal.

Physical work environment is the environment where these human beings are fit with their job (adequate office space and furniture, adequate lighting, no disturbances of noise, clean air circulation).

## Results

### Background characteristics of study participants

A total of 407 study participants were involved in the study with response rate of 94%. Among the respondents, 217 (60.8%) were males. Three hundred thirty five (93.8%) of the employees were Amhara in ethnicity. The majority of the respondents (72.5%) and (72.3%) were married and in the aged interval of 25 to 44 years respectively.

One fourth of the workers had been served for 6 to 10 years, while nearly a quarter were served for about 21years and above. The majority were (56%) with qualification of diploma and above (Table 1).

### Level of employee's performance

The mean level of workers performance was computed to be 76.64% (CI: 76.25-77.03). Of the total respondents, 232 (65%) fallen to the good level of performance (Figure 1).

### Factors associated work performance

The result found that type of work, years of working, salary and type of working department were significantly related to level of workers performance in the final logistic regression model ( $p < 0.05$ ).

Employees whose salary belong to the range of 4284-6487 ETB were four times more likely to have a good level of performance (AOR=3.94; 95% CI: 1.41, 10.99) than those salary were fallen in the range of less than or equal to 1742 ETB.

Moreover, workers who had years of work experience between 16 and 20 were threefold more likely to perform the assigned tasks (AOR=3.07; 95% CI: 1.25, 7.49) compared to whose experience below

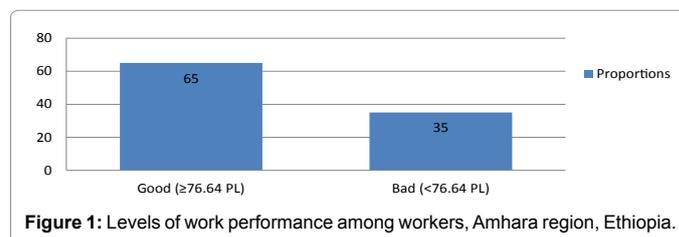


Figure 1: Levels of work performance among workers, Amhara region, Ethiopia.

Variables	Frequency	Percent
<b>Sex</b>		
Male	217	60.8
Female	140	39.2
<b>Marital Status</b>		
Single	84	23.5
Married	259	72.5
Divorced	10	2.8
Widowed	4	1.1
<b>Age (years)</b>		
Up to 24	24	6.7
25-34	143	40.1
35-44	115	32.2
45 and above	75	21
<b>Ethnicity</b>		
Amhara	335	93.8
Agewu	10	2.8
Tigrie	8	2.2
Others	4	1.1
<b>Years of working</b>		
≤5	67	18.8
06-Oct	90	25.2
Nov-15	63	17.6
16-20	54	15.1
21 and above	83	23.2
<b>Educational status</b>		
Others	41	12
Certificate	9	2
College diploma	107	30
Bachelors' degree	129	36
Master and above	71	20
<b>Type of working department</b>		
Curative service division	198	55.5
Education and training division	72	20.1
Preventive health division	40	11.2
Pharmaceutical and diagnostic division	25	7
Administrative division	22	6.2
<b>Type of work</b>		
Health professional	103	28.9
Supportive staff	184	51.5
Other categories	70	19.6
<b>Salary using quintile (ETB)</b>		
≤1742	64	17.9
1743-2627	74	20.7
2628-4283	76	21.3
4284-6487	66	18.5
6488 and above	77	21.6

**Table 1:** Background characteristics of study participant in Amhara region health bureau, Bahir Dar, Northwest Ethiopia, 2016.

5. Respondents whose profession related to health were 68% less likely to perform the given duties (AOR=0.32; 95% CI: 0.13, 0.77) than other professionals.

Concerning type of working department, respondents who assigned in the pharmaceutical and diagnostic division were nearly seven times to accomplished jobs entitled to them (AOR=6.77; 95% CI:2.57, 17.79) compared to its counter parts (Table 2).

## Discussion

Workers performance is the common approach of assessing

quality of healthcare service provision in the world. It has been also implemented in Ethiopia.

The study showed that the mean level of workers performance was computed to be 76.64% (CI: 76.25-77.03). This result is consistent with the study conducted in china in which the rate of job performance was 76.02% (2). This relative lower performance level could be due to the nascent stage of the region performance appraisal system; the stronger the appraisal system, the better in level of performance. The region Civil Service Bureau directives stipulated that unless and otherwise provided justification, the higher level of performance cut off point should not be greater than 79.99%. This could also be much exacerbated because of supervisor's limited knowledge for rate of performance, lack of appraisal skills, manager not taking appraisal seriously, manager not being honest and sincere, the subjectivity of performance appraisal rating, ambitious plan of work and communication barriers between supervisors and employees. Furthermore, about 65% of workers in this study setting whose performance level were fallen to be good. This is almost in agreement with 2004 report of Ken Blanchard companies'. Good workers' job accomplishment is an input for the achievement of the organization that managers should kept employees to motivate in order to make use of their effort to the maximum production.

This study revealed that employee salary was significantly associated with job performance (AOR=3.94; 95% CI: 1.41, 10.99), in agreement with the study conducted in Taiwan [12]. This relationship was also supported by known scholar Van Scotter in his study; tried to associate salary with altruistic behavior. The more the employee is paid, the more feels fair about others' and own job engagement; the more efforts will make in job involvement, which will be positively related to altruistic behavior [13].

Workers who, have been worked for period of years, wobbly interest in their task and felt sense of tediousness in the work there by performed lesser. In contrary to such truth, the study showed that employees who had numbers of years working between 16 and 20 were more likely to perform well (AOR=3.07; 95% CI: 1.25, 7.49) compared to the counter parts, similar to previous literature [14].

This finding demonstrated that types of working department (AOR=2.49; 95% CI: 1.22, 5.12), and type of work (AOR=0.32; 95% CI: 0.13, 0.77) had significantly associated with performance, supported by a study done in Nigeria [15]. Employees whose working department position highest in the structure of the organization were motivated to perform well than in lower rank and nature of work. This is because, such positions and work were among the conducive work environment that have more incentives, statescuse, reduce health hazard, working stress and thus enhance workers commitment to duty.

In addition, employees' performance could be affected by the nature of task assigned for accomplishment and the workplace environment in which the work is being done. Having a good working environment, the employees could apply their energy and full attention to perform work well [16].

Since the study was focusing on permanent workers, underestimation of working performance could be in place. It is possible that efforts of contractual and workers in probation may have an impact on job performance. It was also suggesting that researchers are advisable to have further studies on the subject matter considering qualitative studies triangulated with quantitative. Senior statistical models of Alpha Croumpach and ordinal regression analysis are likely suggested for such outcome variable.

Variables	Category	Level of Performance		COR (95%CI)	AOR (95%CI)
		Good performance N (%)	Not good performance N (%)		
Age in years	Up to 24	10 (42)	14 (58)	1	1
	25-34	99 (69)	44 (31)	3.15 (1.3-7.64)*	2.0 (0.64, 6.25)
	35-44	79 (69)	36 (31)	3.07 (1.25-7.57)*	1.5 (0.41, 5.63)
	45 and above	44 (59)	31 (41)	1.99 (0.78-5.05)	1.49 (0.34, 6.53)
Type of work	Others*	61 (87)	9 (13)	1	1
	Health professional	69 (67)	34 (33)	0.3 (0.13-0.67)*	0.32 (0.13, 0.78)*
	Supportive staff	102 (55)	82 (45)	0.18 (0.09-0.39)*	0.39 (0.15, 1.02)
Years of working	Up to 5	36 (54)	31 (46)	1	1
	06-Oct	62 (69)	28 (31)	1.91 (0.99-3.67)	1.74 (0.81, 3.73)
	Nov-15	44 (70)	19 (30)	1.99 (0.97-4.10)	1.81 (0.78, 4.2)
	16-20	39 (72)	15 (28)	2.24 (1.04-4.81)*	3.1 (1.3, 7.5)*
	21 and above	51 (61)	32 (39)	1.37 (0.72-2.64)	1.96 (0.9, 4.31)
Educational Status	≤12 grade	19 (46)	22 (54)	1	1
	Certificate* diploma	72 (62)	44 (38)	1.9 (0.92-3.89)	0.89 (0.35, 2.25)
	Degree*	141 (70.5)	59 (29.5)	2.77 (1.39-5.49)	0.79 (0.24, 2.56)
Salary (ETB)	≤1742	29 (45)	35 (55)	1	1
	1743-2627	48 (65)	26 (35)	2.23 (1.12-4.42)*	2.65 (1.23, 5.7)*
	2628-4283	51 (67)	25 (33)	2.46 (1.24-4.89)*	3.07 (1.4, 6.74)*
	4284-6487	49 (74)	17 (26)	3.48 (1.66-7.29)*	3.94 (1.41, 11)*
	6488 +	55 (71)	22 (29)	3.02 (1.50-6.06)*	3.39 (1.19, 9.58)*
Type of working department	Curative service division	105 (53)	93 (47)	1	1
	Education and training division	54 (75)	18 (25)	2.66 (1.46, 4.86)*	2.49 (1.22, 5.12)*
	Preventive health division	34 (85)	6 (15)	5.02 (2.02, 12.49)*	6.8 (2.57, 17.79)*
	Pharmaceutical and diagnostic division	22 (88)	3 (12)	6.5 (1.88, 22.40)*	6.17 (1.7, 22.34)*
	Administrative division	17 (77)	5 (23)	3.01 (1.07, 8.48)*	3.76 (1.2, 11.42)*
Supervisory support	Yes	115 (62)	69 (38)	0.8 (0.52, 1.23)	
	No	117 (68)	56 (32)	1	
Physical work environment	Yes	124 (65)	66 (35)	1.03 (0.66, 1.59)	
	No	108 (65)	59 (35)	1	
Job aid	Yes	120 (65)	64 (35)	1.02 (0.66, 1.58)	
	No	112 (65)	61 (35)	1	

\*Significant at P<0.05; \*Above.

**Table 2:** Associated factors and work performance among Employees' in Amhara regional health bureau, Bahir Dar, Northwest, Ethiopia, 2016.

## Conclusion

The level of work performance was 76.64% which was comparable to other studies. The majority of staff performance found to be good. Salary, years of working between 16-20 years, type of working department and type of work were the predictors of employee's performances which determines independently. Encouraging employees with reasonable salary based on their work experience and availing conducive work structure should be considered to have better organizational performances for development. Job rotation within the likely working department and working environment is also advisable for those workers having lesser year of attachment in work in order to improve quality of work. Besides, recruiting employees with year of working better than 16 years must be given attention by regional bureau.

## Acknowledgements

Our sincere gratitude goes to Amhara National Regional State Health Bureau for financial support and the study participants. We would also like to thank Dr. Tegbar Yigzaw and Mr. Mulusew Alemneh for their valuable technical inputs in the course of the study.

## Funding

Funding for the study was obtained partly from ARSHB.

## Consent for publication

Not applicable.

## Availability of data and material

All data and materials are available related to this article for future review on request.

## Authors' contributions

All authors (SB and DD) contributed equally to this work: conceived the idea, design the study, analyze the data, wrote and revised the manuscript.

## Ethics approval and consent to participate

The Ethical Committee of the University of Gondar reviewed and approved the study for ethical clearance. The purpose of the study was explained and permission letter was obtained from the health bureau. Verbal consents were also taken from each participant. Anonymous questionnaires were used and the information collected was stored in safe place to assure confidentiality.

## Competing interest

We declare that we have no competing interests.

## References

1. Markos KS, Sandhya SM (2010) Employee Engagement: The key to improving performance. International Journal of Business and Management 5.

2. Huang S (2015) Factors affecting employee performance—evidence from petrovietnam engineering consultancy J.S.C. Meiho University Institutional Repository 07.
3. Platis C, Reklitis P, Zimeras S (2015) Relation between job satisfaction and job performance in healthcare services. *Procedia - Social and Behavioral Sciences* 175: 480-487.
4. Croome D (2006) *Creating the productive workplace* (2nd edn), Taylor & Francis, USA.
5. Leaman A (1995) Dissatisfaction and office productivity. *Facilities* 13:13-9.
6. Philip CW, Gary DG (2001) Human competency engineering and world class performance: A cross-cultural approach. *Cross cultural management: An International Journal* 8:25-46.
7. Burri GJ, Helander MG (1991) A field study of productivity improvements in the manufacturing of circuit boards. *International Journal of Industrial Ergonomics* 7: 207-215.
8. Chandrasekar K (2011) Workplace environment and its impact on organisational performance in public sector organisations. *International Journal of Enterprise Computing and Business Systems* 1.
9. Raziq A, Maulabakhsh R (2015) Impact of working environment on job satisfaction. *Procedia economics and finance* 23: 717-725.
10. Boles M, Pelletier B, Lynch W (2004) The relationship between health risks and work productivity. *J Occup Environ Med* 46:737-45.
11. Amhara Rional Health Bureau. Frist quarter report of Amhara national regional state health bureau. (2016).
12. Hsiung TL (2014) The Relationships among salary, Altruistic behavior and job performance in the National basketball association. *International Journal of Business and Social Science* 5: 193-200.
13. Scotter JRV (2000) Relationships of task performance and contextual performance with turnover, job satisfaction, and affective commitment. *Human resource management review* number 10:79-95.
14. Kotur B, Anbazhagan S Education and work-experience-Influence on the performance. *Journal of Business and Management* 16: 104-110.
15. Akinyele ST (2007) A Critical assessment of environmental impact on workers' productivity in Nigeria. *Research Journal of Business Management* 1: 50-61.
16. De Croon EM, Sluiter JK, Kuijjer PP, Frings-Dresen MH (2005) The effect of office concepts on worker health and performance: a systematic review of the literature. *Ergonomics* 48: 119-134.