

# Level of Professional Commitment and Associated Factors among Nurses Working In Jimma Zone Public Hospitals; Jimma South West Ethiopia, 2018

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## Summary

**Background:** Nursing profession is a highly stressful profession and nurses are susceptible to the development of burnout; mainly because of the nature and the emotional demands of their profession. Commitment to one's profession has not been studied as extensively as organizational commitment and it has been comparatively neglected. Effective human resources are the major factor of continuity, success, and realization of the goals of health care organizations. However, the extent of level of professional commitment and associated factors among nurses is not well known in Ethiopia in general; particularly in Jimma zone. Therefore, this study was aimed to assess level of professional commitment and associated factors among nurses working at Hospitals in Jimma zone.

**Objective:** The main aim of this study was to assess level of professional commitment and associated factors among nurses working in Jimma Zone public Hospitals from March 10-April 10, 2014.

**Methods:** Institution based cross-sectional study was conducted on 317 nurses. Structured self-administered questionnaires were used to collect data. Data was entered and cleaned by using Epi-data version 3.1 and then it was exported to IBM SPSS version 20 for analysis. Descriptive statistics, Independent sample t-test, one-way ANOVA and linear regression were done to describe, to see mean difference and association of study variables. P-value of less than 0.05 was taken to declare statistical significance.

**Result:** This study showed, 115 (36.3%) of nurses have low level of professional commitment, 88 (27.8%) have moderate level of commitment and only one third 114 (36%) of them have high level of commitment to their profession. Position, organizational commitment and, job satisfaction were identified as factors associated with level of professional commitment among the study participants.

**Conclusion:** Only one third of nurses have better level of professional commitment. So, improving this level of commitment needs collaborative intervention on related factors which is a big homework for managers, nursing service managers of Jimma zone public Hospitals.

**Keywords:** Commitment; Professional commitment; Jimma Zone.

## Background

Professional commitment is a person's involvement, pledge, promise or resolution towards his/her profession and intention to continue working as a nurse. It describes individual attitudes toward their career, recognized as a form of work commitment that individuals have on a career facet and received a great deal of interest worldwide [1, 2]. It involves a group of characteristics which are different from one career to another and include a particular career staffs' identification, autonomy, and receptivity of the professional values and goals [3, 4]. Professional commitment as a predictor for intention to leave the profession and higher the commitment that the nurses had, lower intention to leave their profession [5, 6]. People demonstrating high levels

of professional commitment usually stay in their work for a long time and professional commitment has implications for employees' decision to continue or discontinue membership of their profession [7-9].

The nursing profession is a highly stressful profession and nurses are susceptible to the development of burnout; mainly because of the nature and the emotional demands of their profession [10].

Commitment to one's profession has not been studied as extensively as organizational commitment and it has been comparatively neglected. Effective human resources are the major factor of continuity, success, and realization of the goals of health care organizations [11].

A study conducted Mohammad Montazeri Hospital, City of Najafabad showed, nurses' professional commitment positively influences their job performance and promotes positive client care outcome [12, 13]. Educational status, training, experience, autonomy, motivation and job satisfaction have been identified as the factors related to nurses' clinical competence and professional commitment [4-17]. Lack of commitment and a high level of possibility that the employee would leave the health institution and professional reflected disloyalty to health institution [18].

Now days the main concern of each public health facilities is to provide quality care for their clients. But the main issues here on how to achieve and improve this quality patient care and improved patient outcome [19].

A study conducted in Dera Ismail Khan Show that nurses' commitment towards their profession is important for healthcare organizations, policy makers and nurses. The finding also identified working experience as factors that affect level of commitment among nurses (20).

Successful nursing care requires high organizational commitment and nurses' professional commitment [21]. Nursing work force in every corner of the world, in each health institutions and in any health care settings play a pivotal role to bring quality patient outcome and this all will be influenced by their job satisfaction and level of professional commitment [22]. Study revealed that age, gender, educational level, work experience and marital status; job features such as position, role conflict, role ambiguity, organizational structural characteristics such as the ratio, power centralization and employees work experience have impact on level of employees' commitment. Commitment causes & increases trust towards the organization and is important factor in motivating people's participation in the organization and job [23].

A study conducted in Jordanian hospitals among nurses showed significant relationship between professional commitment and gender or female nurses are more willing to work various nursing activities and more committed than the male nurses. A negative relationship was found with years of experience and level of education [24].

A study done in Imam teaching hospital in northern Iran revealed that total the level of professional commitment was high among nurses. The study also confirmed significant relationship between work related stress, job satisfaction and professional commitment [25].

A facility based cross sectional study conducted in government health facilities of Gurage Zone, South Ethiopia showed positive relationship between perceived leadership style and training opportunity and organizational commitment score [26].

However, the extent of level of professional commitment and associated factors among nurses is not well known in Ethiopia in general; particularly in Jimma zone. Therefore, this study was aimed to assess level of professional commitment and associated factors among nurses working at Hospitals in Jimma zone.

## Methods and Materials

### Study Area and Period

The study was conducted in three public hospitals found in Jimma Zone, Oromia Regional state from March 10-April 10 2014. Jimma is one of the 18 zones of the Oromia Regional State found at 352 kms from Addis Ababa, the capital city of Ethiopia, in the South western part. Based on the 2007 conducted Census by the CSA, this Zone has a total population of 2,486,155, of thus 1,250,527 are male and 1,235,628 female; with an area of 15,568.58 square kilometers [27, 28]. In this zone there are three public hospitals namely, Jimma University specialized hospital (JUSH), Shenen Gibe and Limu Genet hospital. The first two are situated in Jimma town where as the later one is at Limu town which is 72kms far from Jimma town. Except JUSH both are district level. JUSH plays a pivotal role in this zone and it is the only teaching and referral hospital in the southwestern part of the country, and provides specialized clinical services to about 15 million people South West part including those clients referred from Southern parts of Ethiopia [29].

### Study Design

Institution based cross sectional study was conducted.

### Sample Size Determination

The total populations of nurses in the three hospitals were 433. From these 73 of them have work experience of less than 6 months. Census was conducted on the rest study populations that fulfill the inclusion criteria.

### Data Collection Procedures and Quality Control

#### Data Collection Instrument

The questionnaire for this study consisted of Socio-demographic characteristics, professional and Organizational Commitment Scale, Job satisfaction scales, Nurse Physician communication scale, and Job related stress Scale. Professional Commitment Scale adapted from Blau (2003), Organizational Commitment Scale adapted from instrument developed by Meyer and Allen (1988, 1990) which consists of affective, continuance and normative organizational commitment subscale respectively. Job satisfaction scale from McCloskey/Mueller satisfaction scale, Nurse Physician Communication was adapted from a study conducted in Iran and finally Job Related Stress was adapted from expanded nursing stress scale which was developed by Gray-Toft and Anderson and Revised by Susan E. French, Rhonda Lenton.

Five percent of the questionnaire was pre- tested at Woliso Referral Hospital to assess clarity, sequence, consistency, understandability and for total time it takes before the actual data collection. The result of reliability test showed that crumbatch's alpha for, job satisfaction scale, professional commitment scale, organizational commitment scale Nurse Physician communication scale and job related stress scale are 0.84, 0.83, 0.8, 0.86, 0.804 and 0.81 respectively on pre-test.

### Data Collection Personnel

A total of five Diploma Nurses were recruited to distribute, facilitate and to collect data. They have been trained and oriented for one day on the questionnaire and the way of data collection.

### Data Entry and Analysis Procedures

The data was edited, entered into Epi-Data version 3.1 for cleaning and to check completeness and missing values and then exported to IBM SPSS version 22 for analysis. Percentage, Frequency, mean and standard deviation were calculated. For professional commitment subscale, the participant's responses on each item scored, summed: professional commitment score ranging from a minimum score of 07 and maximum score of 28. The higher the score the more professional commitment nurses had to their profession. Professional commitment scores were compared with socio-demographic characteristics using an independent sample t-test and one-way ANOVA. For the purpose of analysis dummy variables were created: Working hospitals into Referral vs. District, Marital status into Single vs. ever married, Working unit into inpatient and outpatient and Title/ position into clinical staff nurse and clinical nurse staff managers. Finally multivariable linear regression was done to see the association between the outcome variable and the independent variables. P-value of less than 0.05 was taken to declare statistical significance.

### Ethical Consideration

Ethical clearance and approval letter to conduct study was obtained from Jimma University Institutional Review Board to communicate with Hospitals administrative body in Jimma zone. Permission letter was obtained from administrative body of each hospital. Prior to administering the questionnaires, the

aims of the study were explained to the participants, also told that participation is voluntarily, confidential and anonymity ensured throughout the execution of the study as participants were not required to disclose personal information on the questionnaire. Finally verbal consent was assured from the study subjects.

### Results

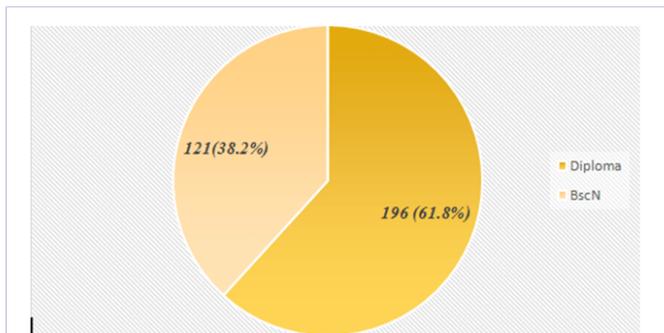
Among 341 study population to whom questionnaire were distributed, 321 respondents returned their questionnaires. From the total returned questionnaires 04 questionnaires have missing information, incomplete answer and place of work and some socio-demographic information were not complete so 317 questionnaire were used in this study which makes 92.96% response rate.

Among the total study participants majority of them 272(85.8%) were working at JUSH and the rest 45(14.2%) were working at District Hospitals (Limu and Shenen Gibe). Concerning gender distribution, half of study participants were female 159(50.2%) & the rest were male. Regarding their marital status, majority of nurses who participate in this study were single which account 171(53.9%) and the rest 138(43.5%), 7(2.2%) & 1(0.3%) were married, divorced and widowed respectively. Concerning Working Unit/department, the top four unit in which majority of nurses working include: Surgical ward, OPD, Medical ward and Pediatrics which account 66 (20.8%), 63 (19.9%), 53(16.7%) and 45 (14.2%) respectively while the rest were working at Gyn/Obs, Chronic Illness, major Operation room, Ophthalmic unit, ICU and Psychiatry as shown on the (Table 1). Coming to the educational qualification of nurses participating in this study, majority of them 196(61.8%) were clinical nurses whereas the rest 121 (38.2%) were Bsc nurses (Figure 1).

**Table1:** Socio-demographic Characteristics in the study of level of professional commitment and associated factors among Nurses Working in Jimma Zone Public Hospitals, May, 2014 (n=317)

Socio-demographic Characteristics		N	%
Working Hospital	JUH	272	85.8
	Shenen Gibe	20	6.3
	Limu Genet	25	7.9
Gender	Male	158	49.8
	Female	159	50.2
Marital status	Married	138	43.5
	Single	171	53.9
	Divorced	7	2.3
	Widowed	1	0.3

Working Unit/department	Medical ward	53	16.7
	Surgical ward	66	20.8
	Intensive Care Unit (ICU)	10	3.2
	Major Operation room	19	6
	Psychiatry	7	2.2
	Pediatrics	45	14.2
	Obstetrics & Gynaecology	22	6.9
	Ophthalmology	12	3.8
	Chronic Illness Follow Up Clinic	20	6.3
	OPD	63	19.9
Age	<24	107	33.8
	25-29	149	47
	30-34	20	6.3
	35-39	14	4.4
	>40	27	8.5
Work Experience in Nursing	0.5 -5 years	244	77.5
	6-10 years	38	12.1
	11-15 years	9	2.9
	>15 years	24	7.6

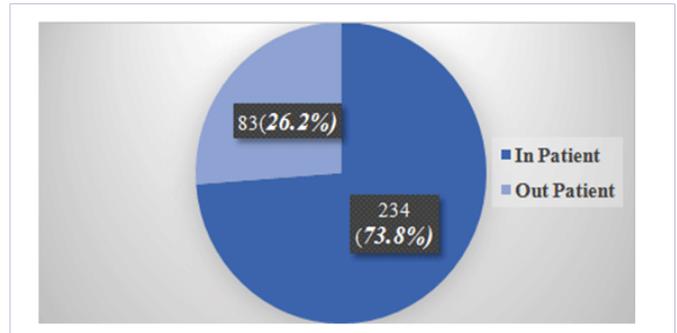


**Figure 1:** Educational qualification of study participants in the study of level of professional commitment and associated factors among Nurses Working in Jimma Zone Public Hospitals, May, 2014.

Regarding study participants position, most of the respondents were staff nurses 282 (89%) who give direct patient care and a few of them were head nurses, shift supervisors and Matron (Table 1).

The mean age of the study participant is 27.83±6.8 with minimum age of 21 and maximum age of 58 years. The minimum monthly salary is 1233, and the maximum monthly salary 4820 Ethiopian birr with means salary of 1860.90±496.26. The average service years of study population are 5.14 ±6.27 years having minimum service of 8 months and maximum years of 39.

Regarding general working unit, majority of nurses 234 (73.8%) were working at inpatient unit while the rest 83 (26.2%) were working at outpatient department (Figure 2).



**Figure 2:** Percentage distribution of study participants' position in the study of intention to stay in nursing profession and its predictors among nurses working at Jimma Zone Public hospitals May 15, 2014.

### Descriptive Statistics of Study Variables and Level of Professional Commitment

Descriptive statistics was used to compute the overall mean and professional commitment and percentage mean score. The minimum score is 7 and the maximum score is 28, for questions about professional commitment. The overall mean professional commitment score of the study participants in this study was (15.73 ± 4.34).

The calculated mean score was changed to percentage mean score to identify percentage of nurses who have better level of commitment to their profession and calculated by using:

Percentage mean score of professional commitment =

$$\frac{\text{Actual mean score}}{\text{Maximum potential score}} * 100\% = (15.73/28)*100\% = 56.17\%$$

(Table 2)

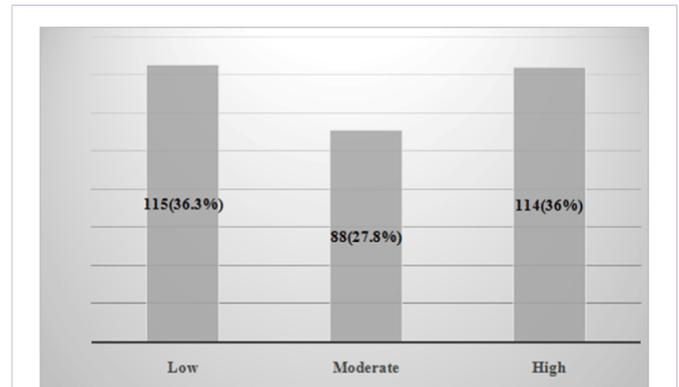
**Table 2:** Descriptive Statistics of the study variables in the study of level of professional commitment and associated factors among Nurses Working in Jimma Zone Public Hospitals, May, 2014.

Study variables	Mini	Max	Mean	S. D
Professional Commitment	7	28	15.73	4.34
Job Satisfaction	15	55	35.19	7.62
Organizational Commitment	16	58	35.04	8.79
Job Related Stress	15	52	29.26	6.63
Nurse Physician Communication	12	60	39.28	4.02

### Overall Level of Professional Commitment

Professional Commitment was computed as having mean score of=15.73±4.34 with maximum score=28 then percentage mean score= 56.17%. To determine the overall level of professional commitment, textile classification was done. Accordingly, 115 (36.3%) of nurses have low level of commitment, 88 (27.8%) have moderate level of commitment and only one third 114 (36%) of them have high level of commitment to their profession (Figure 3).

Independent Samples Test Were done to compare if there is mean difference between groups for variables that are categorized in to two (Table 3). Accordingly, mean difference was seen only in working unit. Nurses working in outpatient department have higher level of professional commitment compared to nurses working in inpatient department having t (315) =2.034, p=0.043with a mean value of (7.39 ±2.56).



**Figure 3:** Levels of professional commitment among nurses in the study of level of professional commitment and associated factors among Nurses Working in Jimma Zone Public Hospitals, May, 2014.

**Table 3:** Mean difference between professional commitment and selected socio-demographic characteristics in the study of level of professional commitment and associated factors among Nurses Working in Jimma Zone Public Hospitals, May, 2014.

Categorized Variables list	Outcome variable	Categeory	M	SD	t	P
Working Unit	Professional commitment	In Patient	6.76	2.36	-2	0.04*
		Out Patient	7.39	2.56	-1.9	
Position	Professional commitment	Clinical Staff nurse	6.9	2.38	-0.61	0.54
		Clinical staff managers	7.17	2.83	-0.54	
Sex	Professional commitment	Male	6.75	2.38	-1.3	0.2
		Female	7.11	2.47	-1.3	
Educational qualification	Professional commitment	Diploma	6.97	2.42	0.38	0.7
		BscN	6.87	2.45	0.38	
Working Hospital	Professional commitment	Referral/ teaching	6.94	2.39	0.2	0.84
		District	6.86	2.69	0.18	
Marital Status	Professional commitment	single	6.79	2.38	-1.1	0.27
		Ever married	7.09	2.48	-1.1	

One-way Analysis of Variance (ANOVA) was done to see if there is a mean difference for professional commitment in Age, Length of Service and Monthly salary, but there is no significant association among these groups (Table 4).

**Table 4:** Mean difference between professional commitment and Length of Service, Monthly Salary category and age Category in the study of level of professional commitment and associated factors among Nurses Working in Jimma Zone Public Hospitals, May, 2014.

Length of Service category					
	Sum of Squares	Df	Mean Square	F	p
Between Groups	21.719	2	10.86	1.849	0.159
Within Groups	1843.89	314	5.87		
Monthly Salary category					
Between Groups	14.19	3	4.73	0.8	0.495
Within Groups	1851.41	313	5.92		
Age Category					
Between Groups	19.96	4	4.99	0.844	0.498
Within Groups	1845.65	312	5.92		

#### Factors Associated with Professional Commitment

**Position** is identified as positively associated with professional commitment ( $\beta = 0.862$ ,  $p = 0.048$ ). Results from t-test also showed that, nurses working in outpatient department have higher level of professional commitment compared to nurses working in inpatient department. This indicated that being assigned at outpatient department increases their level of professional commitment 0.862 times.

**Organizational Commitment** was strongly and significantly associated with professional commitment ( $\beta = .276$ ,  $p < .001$ ). As commitment score to once Organization increases by one unit,

his/her level of professional commitment also increases 0.276 times keeping the other variables constant.

**Job satisfaction** was significantly associated with professional commitment ( $\beta = .089$ ,  $p < .001$ ). As job satisfaction score increases by one unit, the level of professional commitment also increases 0.089 times. This means those nurses satisfied with their job may have better level of commitment to their profession compared to non-satisfied nurses (Table 5).

There was a positive relationship between nurses' position ( $\beta = 0.862$ ,  $p = 0.048$ ), organizational commitment ( $\beta = .276$ ,  $p < .001$ ), job satisfaction ( $\beta = .089$ ,  $p < .001$ ) and professional commitment.

**Table 5:** Multi-variable Linear Regression Analysis results in the study of level of professional commitment and associated factors among Nurses Working in Jimma Zone Public Hospitals, May, 2014.

Model	Unstandardized Coefficients		t	p	95% CI $\beta$	
	$\beta$	Std. E			LB	UB
(Constant)	3.569	2.504	1.425	0.155	-0.36	8.497
Sex	-0.012	0.383	-0.033	0.974	-0.77	0.742
Age	-0.025	0.058	-0.437	0.663	-0.14	0.088
Marital status?	-0.417	0.369	-1.131	0.259	-0.14	0.309
Working experience	0.003	0.006	0.467	0.641	-0.01	0.013
Educational qualification	-0.573	0.84	-0.682	0.496	-0.22	1.081
Working unit	-0.018	0.023	-0.75	0.454	-0.06	0.029
Position	0.862	0.434	1.987	.048*	0.01	1.716
Salary	0	0.001	-0.582	0.561	-0.01	0.001
Working hospital	0.178	0.342	0.522	0.602	-0.49	0.851
Organizational Commitment	0.276	0.024	11.414	<.001*	0.23	0.323
Nurse-Physician Communication	0.006	0.022	0.262	0.793	-0.04	0.049
Job related stress	0.041	0.048	0.846	0.398	-54	0.135
Job Satisfaction	0.089	0.027	3.326	<.001*	0.036	0.141

## Discussion

### Overall level of Professional Commitment

The overall level of professional commitment in this study showed, 115 (36.3%) of nurses have low level of commitment, 88 (27.8%) have moderate level of commitment and only one third 114 (36%) of them have high level of commitment to their profession. This finding is relatively in line with study done in Taiwan [30] in which 32% of nurses reported as they are committed to their profession. The similarity might be related with similarity of nursing care activities and ethical principles in nursing profession in which majority of nurses all over the worlds are responsible to do and accountable for it. Different studies from different parts of the world witnessed as professional commitment can enhance patient safety and promote health care quality [31- 33]. The result of overall level of professional commitment in this study showed only 114 (36%) of nurses have high level of commitment which is not consistent with study done in northern Iran which revealed that high level of professional commitment. The difference might be related with differences related level of job satisfaction, benefits, professional autonomy, motivation and supervisor subordinate relationship among nurses in Iran and Ethiopia. So, studies at different parts of the world highly recommended to work on improving the level of professional commitment and organizational commitment to bring effective, efficient and successful nursing care quality [21, 33, 34].

### Factors Associated with Professional Commitment

From socio-demographic characteristic variables only position was found to have significant association with professional commitment ( $\beta = 0.862$ ,  $p = 0.048$ ). Being assigned at outpatient department will increase the level of professional commitment in this study. This finding is consistent with study done in Iran [23] and not similar with study done in Jourdan, Taiwan and Dera Ismail Khan [20, 35]. The similarity might be due to similarities of socio-demographic variables of nurses in Ethiopia and Iran, but the difference might be due to socio-economic difference and quality of work life among nurses working in Jourdan, Taiwan and Ethiopia [20, 24, 25].

The findings in this study also indicated that job satisfaction ( $\beta = 0.089$ ,  $p < 0.001^*$ ) is positively associated with nurses level of commitment to their profession. This result is supported with a study conducted at northern Iran [25], Jordan [32] and Italy [37]. The similarity of this study may inform concerned body should work to improve job satisfaction. The similarity also confirmed satisfaction with once job may have strong relationship with professional commitment.

**Organizational Commitment** was strongly significantly associated with professional commitment ( $\beta = 0.276$ ,  $p \leq 0.001$ ). The finding is similar with the study done in Ontario Canada [36] and Jordan [32]. In both study area those nurses who have better level of organizational commitment have better level of professional commitment. The similarity might be due to the relationship between an individual's commitment to his/her organization

and professional commitment where ever the country is. Each and every health care organization should consider and work on organizational factors that negatively affect nurses' level of organizational commitment.

### Conclusion and Recommendation

Only one third of nurses have higher level of professional commitment. Position, job satisfaction and Organizational commitment were identified as factors associated with professional commitment.

Natural characteristics of nursing care and increased prevalence of chronic illnesses from time to time and community needs of quality nursing care needs better level of professional commitment from nurse professionals. So nurse managers and hospital administrative body should focus in order to improve nurse's level of professional commitment to improve quality of nursing care. Retention Strategies that focuses on creating organizational commitment awareness should be implemented. Nurse administrators should develop better system that helps to increase nurses' job satisfaction and organizational commitment. Ethiopian Nursing Associations (ENA) with Ministry of Health should support and encourage large scale study in order to have more representative finding the overall status of professional commitment level.

### Conflict of Interests

All authors declared that they have no conflict of interests. Jimma University covered only the survey cost for this study and there is no any funding organization.

### Authors' Contribution

Admasu Belay and Dagmawit Birhanu conceived and designed the protocol. Admasu Belay, Dagmawit Birhanu and Yeshitila Belay contributed on data analysis. Lolemo Kelbiso and Yeshitila Belay wrote the draft and prepared manuscript. Admasu Belay approved it. All authors read and approved the final paper.

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