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# Intention to Stay in Nursing Profession and Its Predictors among Nurses Working in Jimma Zone Public Hospitals, South West Ethiopia

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#### **Abstract**

**Background:** Hospitals are facing difficulties to providing a consistent level of quality nursing care in a fast-changing health environment due to the shortage of experienced nurses which is a critical global issue. A number of nurses were quitting their profession to continue career in another profession in clinical and non-clinical fields. Factors that cause these problems were not investigated in Ethiopia yet. This study aims to assess the level of intention to stay in the nursing profession and its predictors among nurses working in Jimma Zone public Hospitals.

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

**Result:** The overall level of intention to stay is 57.75% of which 133 (42%) of them had low, 95 (30%) of them have moderate and the rest 89 (28.1%) have a high level of intention to stay in the profession. Organizational and professional commitment, working hospital, job satisfaction, organizational factor, and job-related stress were identified as predictors of intention of nurses to stay in their profession.

**Conclusion:** The overall level of intention to stay is low. Only less than one-third of nurses have high intention to stay in their profession in this study. Improving this level of intention needs collaborative intervention in related factors which are a big homework for managers on health sectors of Jimma zone public Hospitals.

**Keywords:** Intention to stay; Nursing; Profession; Predictors; Jimma Zone

## **Background**

Even though quality nursing care dependents on an adequate supply of qualified nursing personnel, the global shortage of nurses reaching a critical level and many nurses continue to voluntarily leave their profession before the normal age of retirement [1]. This hinders the provision of a consistent level of quality nursing care in a fast-changing health environment [2,3]. Leaving once profession begins from feelings of an individual which is 'intention to leave' once profession. This intention ends to actual performance of an action if conditions were not managed early. Due to this; nursing shortage is receiving considerable courtesy from the healthcare industry, educators and researchers at the state and federal levels [4,5].

The financial cost of losing a single nurse has been calculated to equal about twice the nurse's annual salary in one year. Losing these critical employees negatively affects the bottom line of healthcare organizations in a variety of ways including: Decreasing patient care quality, increase the death rate, nurse turnover, staff costs, accident rate [6,7]. The shortage of healthcare professionals, in particular, nurses as they constitute over 50% of the healthcare workforce, is a serious global issue. About 4-54% of nurses worldwide intend to leave the nursing

profession. The current shortage and high turnover rate of nurses is of great concern in many developed and developing countries [8].

WHO reported severe international shortages in human resources for health, specifically nurses and particularly nurses in developing countries [9]. The report also identified threshold in workforce density below which the coverage of essential interventions, including those necessary to meet the health-related Millennium Development Goals (MDGs), is very much unlikely. The minimum level of health workforce (MD, nurses, and midwives) density required to achieve MDGs in Africa, has been estimated at 2.5 per 1000 population [10]. Out of 46 countries in the sub-Saharan Africa region, only 6 have workforce density 2.5 per 1,000 people and over. Indeed, Africa's health workforce density averages 0.8 workers per 1000 population, significantly lower compared to the other regions and to the world median density of 5 per 1,000 populations [11]. Currently, in Ethiopia, the ratio of nurses and midwifery per 10,000 populations is 2.5which is 0.25 per 1000 clearly indicates how much the problem is high [12,13].

Study conducted by Buchan et al. on 'Internationally recruited nurses in London: a survey of career paths and plans', the finding revealed, the majority of respondents (60%) indicated that they planned to stay for at least five years, but just under half (43%) also reported that they were considering leaving their profession [14]. A cross-sectional study was done by Kaewbooncho et al. on job stress and intention to stay at work among Thailand registered nurses in

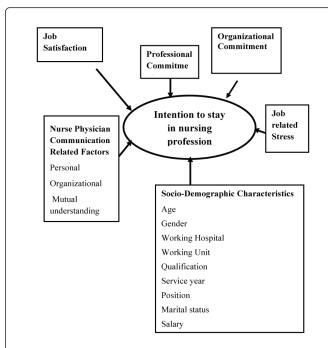
hospital indicated, level of intention to stay in nursing profession was 22.4% [15]. A study done by Banks and Bailey University of Mississippi USA on 'Career Motivation among Licensed Registered Nurses: What Makes Them Remain', findings revealed that 13% of RNs had changed their job after one year, and 37% reported that they felt ready to change jobs mainly because of low pay and poor job satisfaction [16]. On the study done by Sourdif in Montréal, Quebec, Canada on 'Predictors of nurses' intent to stay at work as a nurse, the result showed that, intent to stay was higher for a nurse holding a diploma than a baccalaureate degree and satisfaction at work, satisfaction with administration, organizational commitment, Education qualification and workgroup cohesion [17]. A survey conducted by Tourangeau on 'Nurse Intention to remain employed: understanding and strengthening Determinants' among registered nurses in Ontario Canada: the finding indicated that Job satisfaction, years of employment, work group cohesion, collaboration and organizational commitment of nurses were identified as determinants of nurse intention to remain employed in their profession [18]. A report on International Journal of Nursing Studies in Canada Toronto revealed that, autonomy and relationships with doctors had direct effects on changes in psychological empowerment job satisfaction and intent to stay in nursing profession [6]. A meta-analysis conducted among Jordanian nurses revealed that low level of organizational commitment is an important factor related to turnover intention [19]. According to the study done by Wang et al. on 'Predictors of hospital nurses' intent to stay: in Shanghai China, the finding showed that abscesses of social respect for nurses, organizational commitment, recognition, professional advancement opportunities and working hospital classifications were significant factors which affect nurse intent to stay in their profession [20].

A Study done by Abualrub et al. 'Support, satisfaction and retention among Jordanian nurses in public hospitals in Jordan indicated that career development opportunities were a predictor of commitment to stay in nursing profession [21]. According to the study conducted by Mrayyan among Jordanian nurses 'Job satisfaction and intent to stay: comparing teaching and non-teaching hospitals' Findings showed that Marital status, shift works, years of experience in nursing and current area of work, and age are predictive factors of job satisfaction and retention. Nurses who were working in non-teaching hospitals reported higher job satisfaction and intent to stay rates than those working in teaching hospitals [22]. A Study conducted by Alameddine on 'Retention of health human resources in Lebanon' among nurses the finding revealed that two out of five respondents indicated likelihood to quit their jobs within the next 1-3 years and an additional 13.4% were not sure about quitting. Regression analysis revealed that high levels of burnout, lower level of education and low tenure were all associated with increased likelihood to quit doing as a nurse [23]. According to the survey conducted by Kudo et al. on 'Association between Intention to stay on the Job and Job Satisfaction among Japanese registered nurses and licensed practical nurses the result suggests that the intention to stay in the profession was higher among nurses who were older and more satisfied with their job and working conditions [24]. According to the study conducted by Shacklock in Australia on 'Intention to continue in nursing: work-family conflict, perceptions of autonomy, attachment to work, importance of working to the individual, supervisor-subordinate relationship and interpersonal relationships at work were found to influence nurses' intention to continue working as nurses [25]. The result of the study done by Anna Howe on stabilizing the aged care workforce: An analysis of worker retention and intention in Australian elder care nurses showed that, two-thirds of the aged care workforce were

Committed workers who had been in their job for more than 1 year and intended to stay, whereas less than 5% were uncommitted workers who had been in the job for less than 1 year and did not intend to stay [26]. A study conducted by Chan et al. [27] on 'Factors influence the retention and turnover intentions of registered nurses in a Singapore hospital' found that a larger proportion of RN working in the ICU and surgical ward stated that they would stay in the hospital, compared to those employed in non-ICU. The findings also indicated that those with long years of nursing experience were more likely to stay. Even if more than 70% of the respondents in this study intended to stay employed in the profession, they were not satisfied with the working conditions [27]. Study done by Mokoka et al. [28] on 'Factors influencing the retention of registered nurses in the Gauteng Province of South Africa'; finding suggested that, factors that would influence more than 90.0% of nurses' decisions to stay with their current employers and within their profession related to finances, safety and security, equipment and/or supplies, management, staff relationship and patients flow. Regarding staff-related factors that would contribute to the retention of registered nurses in this study, adequate advancement opportunities in the organization 93.5%; receiving support from colleagues 92.6%; and respecting diversity 90.7% [28]. A study conducted on Economic Analysis of Nurses Shortage in Egypt by Farag suggests that many nurses are choosing to exit the local market either to stay home or convert to other professions [29]. A Study conducted on 'Human Resource Development for Health in Ethiopia: Challenges of Achieving the Millennium development Goals' by Girma et al. [13] by using review of different documents on human resource for health showed that, shortage of Health workers staff in Ethiopia has always been critical. Health worker/population ratios, for example are 3 to 4 times lower than even East African standards. In 2005 in Ethiopia, there were 18,809 nurses, all categories which encompasses about 2.5 nurses per 100,000 population ratio which is very much low when compared with other African countries and developed western and eastern countries [13]. Nursing shortage is a significant part of the on-going healthcare crisis in the health care delivery system. Many nurses are changing their profession while some of them pursue career in another profession and others were quitting the profession altogether. These results from a lack of nursing resources required to give adequate nursing care, justifying the importance of analyzing the problem with the angle of nurses' intent to stay in the profession and understanding the factors that are related to this issue. So, assessing nurses' intention to stay in their profession and its related factors were needed to guide the development of policies on retention of nurses in their working place, within their profession and finally their career plan in the profession and improve nursing care quality and may help those concerned body to use as a baseline data for further study and designing strategies for retention of nurses in their profession.

# **Conceptual Framework**

Developed by the investigator after review of relevant literatures [17,18,20,30-34] (Figure 1).



**Figure 1:** Conceptual framework on nurse's intention to stay in nursing profession and its predictors in public hospitals in Jimma Zone Oromia Regional State, South Western Ethiopia, 2014.

#### **Methods and Materials**

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 km from Addis Ababa, the capital city in the South western part of Ethiopia [35,36]. In this zone, there are three public hospitals namely, Jimma University specialized hospital (JUSH), Shenen Gibe and Limu Genet hospital [37].

# Study design

Institution-based cross-sectional study was conducted among all nurses who were working at Jimma Zone Public Hospitals.

#### 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. A Census was conducted on the rest study populations that fulfill the inclusion criteria.

# Data collection instrument

The data collection tools for this study consisted of Sociodemographic characteristics, professional and Organizational Commitment Scale, Job satisfaction scales, Nurse Physician communication scale, Job related stress Scale and intent to Stay Scale. Socio-demographic characteristics represented by question number 100-109, Professional Commitment Scale adapted from Blau, Organizational Commitment Scale adapted from Meyer and Allen which consists of affective, continuance and normative organizational commitment subscale, Intent to stay scale from McCain's and job satisfaction scale from McCloskey satisfaction scale; for the purpose of this study, 05 subscales of the MMSS are selected from the original scale The five subscales are: Extrinsic Rewards subscale, Co-worker relation sub scale, Professional growth Opportunities sub scale, Praise and Recognition, Control and Responsibility. Nurse Physician Communication Related Factors consists of personal Factors, Organizational factors, and Mutual Understanding at work which was adapted from a study conducted in Iran and finally Job Related Stress from expanded nursing stress scale which was developed by Gray-Toft and Anderson and Revised by Susan E. French, Rhonda Lenton, it contains 13 items which help to identify stressors that cause job stress among nurses. For the purpose of this study 04 subscales were selected based on literature. These include: work overload, lack of support, conflict between nurses and physicians and uncertainty regarding patient treatment.

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 tests showed that Cronbach's alpha for intent to stay scale, Overall 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. Then necessary comments and feedbacks were incorporated in the final instrument. A total of five Diploma Nurses was 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. The collected data was reviewed and checked for completeness and missed and jumped questions by the facilitators and principal investigator.

## Operational definition

**Intent to stay in nursing profession:** Nurses decision to stay in their profession which was measured by 03 items in nursing profession having a 4 point Likert (1=strongly disagree to 4=strongly agree) the sum score ranging from a minimum of 03 to maximum of 12 the higher the score the higher intention to stay in the profession.

# 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 20 for analysis. Percentage, Frequency, mean and standard deviation were calculated. For intent to stay subscale, the participant's responses for each item scored, summed: Intent to stay score ranging from a minimum score of 03 and maximum score of 12. The higher the score the more intention to stay nurses had in their profession. Except nurse physician communication scale all independent variables were summed and overall score were taken for analysis, but in nurse physician communication scale total score for mutual understanding, personal factors and organizational factors were used independently. For the purpose of analysis dummy variables were created: Working hospitals into Referal 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. Then bi-variate analysis was done to select candidate variables. Variables with P-value less than 0.25 in the bi-variate analysis were included in the multivariable model. Finally multivariable linear regression was done to see the association for the predictor and the outcome variables. In multivariable, all candidate variables were

interred once then variables with greater p-value removed until only significant variables left in the model.  $\beta$ -coefficients, p-value and 95% CI were used to show predictors of intent to stay. P-value of less than 0.05 will be taken as statistically significant.

Ethical clearance and approval letter to conduct study was obtained from JUCPHMS, 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 purpose of study was 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 and written consent was assured from the study subjects.

#### Results

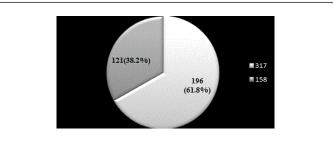
Among 341 study populations to whom questionnaire was distributed, 321 respondents returned their questionnaires. 317 questionnaires were used in this study which makes 92.96% response rate. As shown on Table 1, among the total study participants majority of them 272 (85.8%) were working at JUSH and the rest 45 (14.2%) was working at District Hospitals (Limu and Shenen Gibe). Concerning gender distribution, half of the study participants were female 159 (50.2%) and the rest were male. Regarding their marital status, majority of nurses that participate in this study were single which account 171 (53.9%) and the rest 138 (43.5%), 7 (2.2%) and 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 B.Sc. nurses (Figure 2). Regarding to study participants position, most of the respondents were staff nurses 282 (89%) that gives direct patient care givers and a few of them were head nurses, shift supervisors and Matron.

The mean age of the study participant is  $27.83 \pm 6.8$  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  $\pm$  496.26. The average service years of study population are  $5.14 \pm 6.27$  years having minimum service of 8 months and maximum years of 39.

Socio-demographic characteristics N%						
	JUSH 272 85					
Working Hospital	Shenen Gibe	20	6.3			
	Limu Genet	25	7.9			
	Total	317	100			
Gender	Male	158	49.8			
	Female	159	50.2			
	Total	317	100			
Marital status	Married	138	43.5			

	0' - 1	474	50.0
	Single	171	53.9
	Divorced	7	2.3
	Widowed	1	0.3
	Total	317	100
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 and Gynecology	22	6.9
	Ophthalmology	12	3.8
	Chronic Illness Follow Up Clinic	20	6.3
	OPD	63	19.9
	Total	317	100
Age	<24	107	33.8
	25-29	149	47
	30-34	20	6.3
	35-39	14	4.4
	>40	27	8.5
	Total	317	100
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
	Total	317	100

**Table 1:** Socio-demographic characteristics of nurse's working at Jimma Zone public Hospitals Jimma South West of Ethiopia May, 2014.



**Figure 2:** Educational qualification of the study participants working at Jimma Zone Public hospitals May 15, 2014.

## Respondents level of intention to stay in the profession

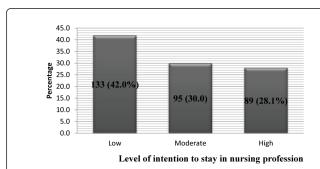
Descriptive statistics was used to compute the overall mean and overall intention to stay and percentage mean score. The minimum score are 03 and the maximum score are 12, for questions about intention to stay. The overall mean intention to stay score of the study participants in this study was  $(6.93 \pm 2.43)$ .

The calculated mean score was changed in to percentage mean score to identify percentage of nurses who intend to stay in the profession. The overall level of intention to stay in nursing profession for the study participant is 57.75% (Table 2).

Mean and Percentage mean score	Min.	Max.	М	SD
Intent to stay score	3	12	6.93	2.43
Percentage Mean Score for Intent to stay	25	100	57.75	20.25

**Table 2:** Mean and percentage mean score in the study of intention to stay in nursing profession among nurses working in Jimma Zone Public Hospitals; Jimma South West Ethiopia May 14, 2014.

The level of intention to stay was done by using data driven classification (tertiale classification by rank order); the lower tertiale represents low level, the middle tertiale represents to moderate level where as upper tertiale indicate the higher level of intention to stay. Accordingly 133 (42%) s of nurses has low levels of intention to stay, 95 (30%) nurses have moderate level of intention to stay and only 89 (28%) of nurses have high level of intention to stay in nursing profession (Figure 3 and Table 3).



**Figure 3:** Levels of intention to stay in nursing profession among nurses working at Jimma Zone Public Hospitals Jimma South West Ethiopia may 2014.

Predictors variables	Unstandardized Coefficients				95% CI	for β
	β	Std. Error	t	р	Lower Bound	Upper Bound
Sex	0.35	0.27	1.27	0.204*	-0.189	0.884
Age	0.02	0.02	1.22	0.223*	-0.015	0.064
Educational qualification	-0.11	0.28	-0.38	0.705	-0.66	0.447
salary	0.001	0.001	0.62	0.537	0.0001	0.001

Working at District Hospital	-0.078	0.39	-0.2	0.042*	-0.849	0.692
Marital Status	0.3	0.27	1.09	0.273	-0.238	0.839
Position	0.27	0.44	0.61	0.54	-0.59	1.125
Working Unit	0.63	0.31	2.03	0.043*	0.021	1.236
Length of Service	0.35	0.23	1.5283	0.128*	-0.101	0.799
Nurse Physician Communication Attitude towards Work	-0.07	0.04	-1.84	0.067*	-0.149	0.005
Nurse Physician Communication Organizational factor	-0.09	0.02	-4.14	0.000*	-0.142	-0.05
Nurse Physician Communication Personal Factor	0.09	0.05	1.92	0.054*	-0.001	0.185
Organizational Commitment	0.15	0.01	11.02	0.000*	0.12	0.172
Professional Commitment	0.29	0.03	11.06	0.000*	0.243	0.349
Overall Stress score	-0.15	0.009	-8.02	0.000*	-0.093	-0.06
Overall Job satisfaction	0.044	0.01	4.55	0.000*	0.025	0.063

Variables having p-value of less than 0.25 are candidate for MVLR, CI=Confidence Interval for  $\beta^{\star}$ =Indicate selected variables

**Table 3:** Bivariate analysis showing lists of candidate variables for multivariable linear regression in the study of intention to stay in nursing profession among nurses working in Jimma Zone Public Hospitals Jimma South West Ethiopia May 14, 2014.

The candidate variables were interred in multivariable linear regression model once. Then, variables having greater p-value were removed one by one until only significant variables left in the model. Multivariable linear regression result showed that six independent variables contributes 43.6% variation in intention to stay in nursing profession among nurses working in Jimma zone public Hospitals on the final model (Table 4).

Predictor Variables	Unstandardize d Coefficients				95.0% CI for β	
	β	Std. Error	t	P	Lower Boun d	Upper Boun d
(Constant)	3.787	1.109	3.414	0.001	1.604	5.97
Sex	0.01	0.205	0.049	0.961	-0.394	0.414
Age	0.004	0.015	0.285	0.776	-0.025	0.034
Working at District Hospital	-0.847	0.296	-2.858	0.005*	-1.43	-0.264
Nurse Physician Communication Organizational factor	-0.037	0.018	-2.022	0.044*	-0.073	-0.001

Professional Commitment	0.166	0.032	5.238	0.000**	0.104	0.228
Organizational Commitment	0.079	0.02	4.545	0.000**	0.04	0.102
Job related Stress	-0.043	0.01	-5.224	0.000**	-0.059	-0.027
Job satisfaction	0.019	0.01	2.535	0.012*	0.004	0.035

Adjusted R2=0.436, Maximum VIF=1.85and P<0.0001, F (41.2) and \*=Indicate significant value at (p<0.05), \*\*=indicate highly significant value

**Table 4:** Multivariable linear regression analysis final model for the study of intention to stay in nursing profession among nurses working in Jimma Zone Public Hospitals Jimma South West Ethiopia May 14, 2014

Working at district hospital is negatively significant predictor of intention to stay in nursing profession ( $\beta$ =-0.847, p=0.005). Being at district hospital or Working at district hospital decreases intention of nurses to stay in their profession by 0.847 times keeping the other variables constant. Organizational factor is significant predictor of intention to stay in nursing profession ( $\beta$ =-0.037, p=0.044) which indicates organizational factors like treating nurses and physicians differently by hospital managers, absence of open stage to discuss and solve problems related to nurse physician communication, ambiguity of role and responsibility among few nurses and physicians and absence of mutual understanding during nurse Physician Communication decreases intention of nurses to stay in their profession by 0.037 amount keeping the other variables constant. Overall Job related Stress was statistically significant in predicting intention to stay in nursing profession ( $\beta$ =-0.043, p<0.0001) which indicates stress due to lack of support, work load, conflict and uncertainty regarding the treatment of the patient decrease intention of nurses' to stay in their profession by 0.043 amount.

Overall job satisfaction was positively and statistically significant predictor of intention to stay in nursing profession ( $\beta$ =0.019, p=0.012). As job satisfaction scores increases by one unit, intention to stay also increases 0.019 times. Organizational Commitment was strongly significant positive predictor of intention to stay in nursing profession ( $\beta$ =0.079, p<0.0001). As commitment score to their Organization increases by one unit, their intentions to stay in the profession also increases 0.079 times. Professional Commitment is also strongly and positively significant predictors of nurses' intention to stay in their profession ( $\beta$ =0.166, p<0.0001). When Commitment scores increases by a unit, intention to stay also increases by 0.166 times keeping the other variables constant.

## Discussion

The total scores of intent to stay ranged from 3 to 12, with a mean value of  $(6.93 \pm 2.43)$ . The level of intention to stay in nursing profession is 57.75% in this study. This result is better when compared with a study done on Thailand registered nurses which indicated the level of intention to stay in nursing profession were 22.4% was [15]. The difference may be due to socio economic difference and alternative job for nurses in Thailand and Jimma zone nurses if they leave the profession. The finding is also relatively the same with Study conducted in London in which the finding revealed that, the majority of respondents (60%) indicated that they planned to stay for at least five years and longer [14], but lower when compared with a study

conducted in a Singapore hospital in which more than 70% of the nurses intended to stay in their profession [27]. Differences might be related to professional and organizational commitment level, job satisfaction level, stress related to job of nurses in Jimma zone and Singapore.

On tertiale classification, level of intention to stay in nursing profession in this study 133 (42%) of nurses has low levels of intention to stay, 95 (30%) nurses have moderate level of intention to stay and 89 (28%) of nurses have high level of intention to stay. This indicates that, majority of nurses have low and moderate level of intention to stay in this study which is supported with study done among Chinese nurses who report low and moderate levels of intention to stay in their profession [33].

From Socio-demographic characteristic variables only working hospital was found to have significant association with nurses' intent to stay in this study ( $\beta$ =-0.847, P=0.005). Nurses working at referral hospital have better intention to stay in the profession compared to those nurses working at district hospitals. The result is supported with the study conducted in Shanghai China in which nurses in tertiary hospitals have better intention to stay in their profession compared with those in primary and secondary hospitals [20].

The findings in this study also indicated that overall job satisfaction  $(\beta=0.019, p=0.012)$  is positively associated with nurses' intent to stay in their profession. This result is supported with a study conducted at University of Kansas (USA) in which positive relationship between nurse's job satisfaction and intent to stay was identified [38]. Also consistent with the study conducted among Japanese Nurses; result of the study revealed that intention to stay in the profession was higher among nurses who were more satisfied with work and working conditions [24], with study on Jordanian nurses indicated that, nurses who were satisfied in their jobs are more likely to remain in their jobs and their profession [22], with study conducted in Shanghai China which revealed that overall nurse job satisfaction and years of employment in the hospital were predictors of intention to stay in nursing profession [34], with a study conducted in Tanzania, Malawi, and South Africa which showed, turnover from the nursing profession is higher on those nurses who are dissatisfied with their job [39].

Organizational Commitment was strongly significant positive predictor of intention to stay in nursing profession in this study ( $\beta = 0.079,~p \leq 0.0001$ ). The finding is similar with the study done in Ontario Canada [34] and Jordan [19]. In both study area those nurses that have better level of organizational commitment have better intention to stay in their profession. The similarity might be due to the relationship between an individual's commitment to his/her organization and intention to stay in his/her organization where ever the country is.

Professional Commitment is also strongly and positively significant predictors of nurses' intention to stay in their profession (p<0.0001). This result is consistent with the study done in Shanghai, and People's Republic of China in which Job satisfaction and occupational commitment are positively associated with nurses' intent to stay in their profession [33]. Professional/occupational commitment is directly related to intention of nurses to stay in their profession which indicates committed workers are those workers that devote themselves to their profession and solve problems instead of leaving the profession. Also the result is supported with study done in South Africa in which better working relationships and professional

commitment were associated with greater retention of nurses in their profession [40].

Organizational factor is significant predictor of intention to stay in nursing profession ( $\beta$ =-0.037, p=0.023) which indicates those organizational factors like treating nurses and physicians differently by hospital managers, absence of open stage to discuss and solve problems related to nurse physician communication, ambiguity of role and responsibility and absence of mutual understanding in nurse Physician Communication decreases intention of nurses to stay in their profession. The finding is consistent with the study conducted in University of Toronto in which nurses wanted to stay employed in their profession when they felt that their work group was stable and dependable to each other, when they are trusted and respected each other with other team members particularly physicians [34]. Also supported with study conducted in Canada which revealed that relationship of physicians had direct effects on intent to stay in nursing profession [6]. The finding is also supported with study conducted across four states of Australia, in which nurse's intentions to stay in their profession were influenced by conflict, perceptions of autonomy, supervisor-subordinate relationship and interpersonal relationships at work [25]. The result of study done in Gauteng Province of South Africa in which of nurse's decisions to stay with their current employers and their profession related with finances, safety and security, equipment and/or supplies, management and nurse-physician relationship in patient care also support the finding of this study [28].

Job related stress was statistically significant predictor of intention to stay in nursing profession ( $\beta$ =-0.043, p  $\leq$  0.0001) which indicates stress from immediate supervisor, not have enough time to provide emotional support to the patients and respond to the needs of patients, families, too many non-nursing tasks such as clerical work, disagreement with physicians concerning the treatment of a patient, Conflict with supervisor, inadequate information from a physician regarding the medical condition of a patient and a physician ordering what appears to be inappropriate treatment for a patient decreases intention of nurse's to stay in their profession. These findings are supported with the study done in Quebec Canada, Thailand and Jordanian nurses in which Satisfaction at work and satisfaction with administration [15,17], a negative relationship between job related stress and intention to stay in the profession respectively. Nurses who reported having more recognition for their performance and achievements experienced less level of job related stress and have better levels of intention to stay in their profession [21]. Study conducted in Krishna District India also support these findings in which majority of nurses reported that there are frequent occurrence of stress associated with uncertainty concerning treatment, dealing with patient and families, workload, Conflict with physicians, supervisors and peers [41].

# **Strength and Limitation**

Data collection method was census which includes all participants that fulfill inclusion criteria. The finding of this study is limited to hospitals; so that the generalization of the finding may not be for health centers of Jimma Zone. Due to limitation of literature on this topic in this country comparison of study results were done with other countries where the health institution setup, health policy and other factors may differ.

# **Conclusion and Recommendation**

Only less than one third of nurses have higher intention to stay in their profession. Organizational commitment, professional commitment, job satisfaction, working hospital, organizational factor from nurse physician communication factors, and job related stress were identified as predictors of intent to stay in nursing profession.

Natural characteristics of nursing care and increased prevalence of chronic illnesses from time to time and community needs of quality nursing care needs better nurses' intention to stay in their profession. In contrast to these realities there is low intention to stay among nurses in this study; so nurse managers and hospital administrative body should focus in order to improve nurse's intent to stay in their profession and improve quality of nursing care delivered to the consumers. Retention Strategies that focuses on creating organizational, professional commitment awareness should be implemented. Nurse administrators should develop better system that help to increase nurses job satisfaction occupational commitment and Professional commitment to improve nurse's intent to stay and retention. Ethiopian Nursing Associations (ENA) with Ministry of Health should support and encourage large scale study in order to have more representative finding on intention of nurses to stay in their profession & its consequences of the country and deal the issue with the concerned bodies to retain those expensive and brilliant nurses leaving the profession.

# **Implication for Practice and Policy**

Different study confirmed that, knowing the level of intention to stay and its associated factors helps to strengthen the staff retention activities, prevent or minimize actual turnover, gain good quality nursing care, great patient satisfaction, minimum job related stress, better organizational and professional commitment and better and fast professional development.

#### **Competing Interests**

The authors declare that there is no conflict of interests.

# **Author's Contribution**

Admasu Belay initiates the study, contributed to the study design, analyzed the data, coordinated the study, and wrote the paper; Tefera Belachew contributed to the study design, coordinated the study, reviewed the manuscript seriously, development of survey instruments, and assisted with data analysis. Wadu Wolancho contributed to the study design and commented on the manuscript Gugsa Nemera contributed to the study design and commented on the manuscript, assisted with data analysis and coordinated the study. All author read and approved the final manuscript.

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