# Nurses are leaving the nursing profession: A finding from the willingness of the nurses to stay in the nursing profession among nurses working in selected public hospitals of Wollega Zones, Oromia, Ethiopia

SAGE Open Medicine Volume 10: 1–9 © The Author(s) 2022 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/20503121221081755 journals.sagepub.com/home/smo

Diriba Mulisa<sup>1</sup>, Tadesse Tolossa<sup>2</sup>, Adugna Oluma Ayana<sup>1</sup>, Misganu Teshoma Regasa<sup>1</sup>, Lami Bayisa<sup>1</sup>, Tesfaye Abera<sup>1</sup>, Alemnesh Mosisa<sup>1</sup>, Bizuneh Wakuma<sup>3</sup>, Werku Etafa<sup>3</sup>, Reta Tsegaye<sup>1</sup>, Getahun Fetensa<sup>1</sup>, Ebisa Turi<sup>2</sup>, Dereje Chala Diriba<sup>1</sup>, Merga Besho<sup>4</sup> and Getu Mosisa<sup>1</sup>

### Abstract

**Background:** The willingness of nurses to stay in nursing profession is nurses stay in the nursing profession without having intention to shift their works to other professions. In healthcare systems, nurses are currently leaving their work. To give quality of health, nurses have to stay in their work. The aim of this study was to find the willingness of the nurses to stay in the nursing profession and associated factors.

**Methods:** An institution-based cross-sectional study was employed among nurses in selected hospitals. After checking for completeness, the data were interred into Epi Data version 3 and exported to Stata SE version 14 for analysis. Then, the descriptive statistics were computed. To find association, logistic regression was computed. Covariates from binary logistic regression were a candidate for multivariate logistic regression at *p*-value  $\leq 0.25$ . Variables in the final model were selected by the stepwise backward selection procedure. In the end, variables with a *p*-value  $\leq 0.05$  were considered as statistically significant. **Results:** In this study, 349 nurses have participated with a 100% response rate and more than half of the participants were male 188 (53.87%). The proportion of nurses who have the willingness to stay in the nursing proportion is 54.44% (95% confidence interval=0.491, 0.59). Getting relatively high salary (adjusted odd ratio=1.81 (95% confidence interval=1.05, 3.11)), no presence of support among colleagues (adjusted odd ratio=0.10 (95% confidence interval=0.05, 0.22)), not having participation in training (adjusted odd ratio=0.49 (95% confidence interval=0.26, 1.81)), having good autonomy in the nursing profession (adjusted odd ratio=0.41 (95% confidence interval=0.23, 0.70)), and having a good sense of self-calling for the nursing profession among nurses (adjusted odd ratio=2.85 (95% confidence interval=1.64, 4.97)) are the factors related with willingness of the nurses to stay in the nursing profession.

**Conclusion and recommendation:** To bring development in the nursing profession, it is a must to staying experienced nurses in the nursing profession. Therefore, to increase the willingness of nurses in the nursing profession, it is better to increase the salary of nurses, giving frequent training for the nurses, initiate the nurses to support one another, and encourage the nurses to have sense of self-calling for nursing profession. This is accomplished if there is a harmonious relationship between the governments, nurses, and other stakeholders in the healthcare delivery system.

### Keywords

Willingness, nurses, profession, Ethiopia

Date received: 20 July 2021; accepted: 2 February 2022

<sup>4</sup>Department of Midwifery, School of Nursing and Midwifery, Wollega University, Nekemte, Ethiopia

#### **Corresponding author:**

Diriba Mulisa, School of Nursing and Midwifery, Institute of Health Sciences, Wollega University, P.O. Box 395, Nekemte, Ethiopia. Email: diribamulisa@gmail.com

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage).

<sup>&</sup>lt;sup>1</sup>School of Nursing and Midwifery, Institute of Health Sciences, Wollega University, Nekemte, Ethiopia

<sup>&</sup>lt;sup>2</sup>Department of Public Health, Institutes of Health Sciences, Wollega University, Nekemte, Ethiopia

<sup>&</sup>lt;sup>3</sup>Department of Pediatric Nursing, School of Nursing and Midwifery, Wollega University, Nekemte, Ethiopia

# Introduction

The willingness of nurses to stay in the nursing profession is nurses stay in nursing profession without having the intention to shift their works to other professions.<sup>1</sup> The nursing profession has suffered many problems since its discovery. From those many problems, one is the leave of experienced nurses from nursing profession.<sup>1–3</sup> Without nursing involvements, it is difficult to get quality care in any setting of healthcare services.<sup>4</sup> This quality of nursing healthcare service is achieved if experienced nurses and more educated nurses stay in the nursing profession.<sup>5</sup> In the modern era of nursing care, the need for bachelor's degree holders staff and above nurses is required at the healthcare facility.<sup>5,6</sup>

Everything in the healthcare system is changed from time to time regarding health promotion, disease prevention, and treatments of illness using advanced technology.<sup>7</sup> For this required advanced intervention regarding giving healthcare, nurses have to stay in nursing promotion and update themselves in their fields of nursing.<sup>8</sup>

Goal 3 of the sustainable development goal said that "we have to ensure healthy life and promote wellbeing for all at all ages."9 Without achieving quality healthcare, it is difficult to attain all sustainable development goals.<sup>10</sup> Nurses are on the front line to achieve the quality of care.<sup>11</sup> Based on the current trend in which nurses are leaving nursing promotion, it is difficult to achieve this sustainable development goal of Goal 3. Because currently what is common is that a lot of nurses are leaving the nursing profession.<sup>1,2,3,12,13</sup> Research conducted in Turkey indicated that high proportion of nurses have the intent to leave their nursing profession.<sup>12</sup> Research conducted in Jimma zone public hospital of the southwest part of Ethiopia indicated that 57.75% of nurses have the willingness to stay in the nursing profession.<sup>1</sup> The range of intent of nurses to leave nurses profession in Ethiopia ranges from 39.8% to 66.37%.<sup>1-3</sup>

Money attempts have been conducted to maintain the nurses in the nursing profession. In money setting of the world, there is a change in the trend of the nursing education and there is also a chance of getting a PhD degree in this field.<sup>11,14</sup> There is also a program of capacity building in nursing as a world including Ethiopia.<sup>15</sup> The nurses to patient ratio is not as previous year that is currently more nurses have been employed and the load on nurses has decreased.<sup>16</sup> But those initiative factors cannot maintain the nurses in their nursing profession. This indicated that there are some things that have to be available to maintain the nurses in their profession.

The nurses are some reasons that initiate them to leave their profession. Previously conducted research showed that the willingness of the nurses to stay in the nursing profession is affected by many factors as the year of working experiences, job-related stress, marital status, organization factors, level of education, autonomy of the nurses in their works, and job satisfaction.<sup>1,2,12,17–19</sup> The aim of this study was to assess the willingness of the nurses to stay in the nursing profession and associated factors. The research findings will help the governments, the ministry of health, patients, and nurses themselves by providing means of maintaining the experienced nurses in the nursing profession.

#### Method

An institutional-based, cross-sectional study was employed among nurses working in six hospitals of Wollega Zones in western parts of Ethiopia. The study was conducted during the period from 21 September to 29 December 2020. Wollega zones are located in the Oromia regional state of Ethiopia. Those Wollega zones in Ethiopia have four different administrative zones and this research was conducted in three zones of those four regions. From those identified zones, again six hospitals were selected using lottery method. Those accepted hospitals were as follows: Shambu General Hospital (in Horo Guduru Wollega Zone), Nekemte Specialized Hospital (in east Wollega Zone), Nejo General Hospital (from West Wollega Zone), Wollega University Referral Hospital (from East Wollega zone of Nekemte town), Arjo Hospital (East Wollega zones), and Sire Hospital (in East Wollega zone).

For this study, the source populations were all nurses working in Wollega Zones hospitals of western parts of Ethiopia. Nurses who were available during the study period at the selected hospitals were considered as the study population. As inclusion and exclusion criteria, those all nurses who were working in the hospitals for at least 6 months were included in the study. Those who have been excluded from the study are those nurses who were on leave and not present during the study period due to many reasons as illness, other personal problems, or other related problems that inhibit the nurses to go the hospital.

#### Sample size determination

The double population proportion formula was used to get the sample size. To do that, previously identified independent significant variables were considered for calculating the sample size of the study. Independent variable that is sex (male/female) was yielded the largest sample size.<sup>20</sup> Epi Info version 7 software application was used to calculate the final sample size. In this case, proportion of outcome in the female as exposed group is 66.85% and the male as a control group is 51.70%. By considering a 5% margin of error and 80% power, this sex variable yields the largest sample size that is 332. Again by adding a 5% non-response rate, the final sample size was decided to be 349. Using the finally calculated sample size, the proportional allocation was done for all selected public hospitals of Wollega Zones. In this case, Shambu General Hospital has 55 nurses, Wollega University Referral Hospital has 145 nurses, Nekemte Specialized Hospital has 175 nurses, Argo General Hospital has 37 nurses, Nejo General Hospital has 57 nurses, and Sire Hospital has 30 nurses. Based on this number, 349 nurses have been selected from all hospitals.

# Sampling procedure

In this study to reach the specific individual participants, systematic sampling techniques were used. To reach each nurse first ID numbers of nurses who have been working in the given hospital was identified. All nurses have ID number that is available by list on the hospitals' registration book of the nursing staff. That is, each hospital has nurse's registration book. The nurses have registered on chronological order based on their ID number. Those who have rented in the hospital get the first nurses' ID number. The starting point is based on older of registered ID number. Based on the proportional allocation, the lottery method was computed for "K" value. Based on this lottery method for "k" value, every nurse at first accepted k and every "K" interval is accepted from the given hospital. Every selected hospital has a different "K" value. When the choice nurse is not available due to many reasons during the study period, the next nurse was accepted to be participating. This was done until the required numbers of nurses from the given hospitals was obtained for this study.

# Data collection tool and technique of data collection

The tools in this study have been selected from different previously published articles. The question has four parts under categories of socio-demographic characteristics, characteristics of the nurses concerning their profession, the Halls professionalism measuring items related to believing in one's professional autonomy, and belief in self-calling for their professionalism measuring items has five dimensions of which each containing five items under their respective categories. Each item in all categories was measured on a 5-point Likert-type scale.<sup>21</sup>

The nurses were evaluated how well each statement corresponded to the way they felt and behaved regarding nursing autonomy and give sense of self-calling for their profession. In this case, the response was ranged from 1 (strongly disagree) to 5 (strongly agree). To get the level of autonomy and sense of self-calling among nurses, the mean score were considered. Above mean score was considered as good and below the mean score is considered as poor for both autonomy and sense of self-calling for nursing profession. By talking this good or poor score independent variable was created for both autonomy parts and sense of self-calling for nursing profession among nurses.

# Data collection technique and quality assurance

The data were collected by two BSc nurses and one MPH holder as a supervisor for each hospital. Self-answered questions were distributed for each nurse nurses in the selected hospital. To maintain data quality, the training was given for data collectors and supervisors for one (1)day, and a pretest was conducted to maintain consistency of the question at another hospital (Gida Ayana Hospital). The pretest was conducted on 5% of decided sample size. The question was prepared in the English language, and the data were collected again in English language. The data collection was daily monitored by the supervisor.

### Statistical analysis

After data were checked for its completeness and correctness, it was entered using Epi data version 3 and exported to Stata SE version 14 for analysis. Initially before making an analysis descriptive statistics were computed by running simple frequencies and cross-tabulation. Mean value with confidence interval and percentages were used to summarize characteristics of every involved variable. For the autonomy and self-calling for the profession part questions, the mean value was computed and the question was dichotomized. The dependent question that is having the wish to stay in the nursing profession was recorded as 1 (one) for those who wish in the nursing profession and 0 (zero) for those who do not wish in nursing profession. Bivariate and multivariate logistic regression was used to identify covariate associated with the willingness of the nurses to stay in the nursing profession. Independent variables with a *p*-value  $\leq 0.25$  in the bivariate analysis were included in the multivariate analysis. Then, variables in the final model were selected by the stepwise backward selection procedure. In this binary logistic regression, the model of the goodness of fit was done using the log-likelihood goodness-of-fit test. Crude and adjusted odds ratios (CORs and AORs) with 95% confidence intervals (CIs) were computed and statistically, significance variables were considered at a p-value < 0.05. Finally, the finding was presented with, table and description forms.

# Results

### Nurses' socio-demographic characteristics

In this study, 349 nurses have participated with a100% response rate and more than half of the participants were male 188 (53.87%). Regarding their age, more percent of the nurses are relatively younger 206 (59.03%). Again greater than half of the nurses involved in this research are married 229 (65.62%). Considering year of working experience among nurses, greater than half of them have less than 6 years of working experience 214 (61.32%) (Table 1).

Table I. Nurses' socio-demographic characteristics.

Variables	Category	Frequency (n)	Percent (%)	
Sex	Male	188	53.87	
	Female	161	46.13	
Mean age	<28 years	206	59.03	
J. J	≥28years old	143	40.97	
Religion	Protestant	261	74.79	
0	Orthodox	69	19.77	
	Muslim	8	2.29	
	Others	11	3.15	
Marital status	Unmarried	103	29.51	
	Married	229	65.62	
	Widowed/divorced	17	4.87	
Current work area	Nurse director	4	1.15	
	Inpatient	117	33.52	
	Outpatient	47	13.47	
	Operation room	92	26.36	
	Emergency	38	10.89	
	pediatric	36	10.32	
	Intensive care unit	7	2.01	
	others	8	2.29	
Education level	Diploma	106	30.37	
	Degree	243	69.63	
Experience	≥6 years	214	61.32	
	<6 years	135	38.68	
Salary	<5072	157	44.99	
,	≥5072	192	55.01	

# Characteristics of the nurses concerning nursing profession

In this research, the characteristics of the nurses regarding their profession have been assessed. Despite nursing is being their main profession, the majority of the nurses participated in this study do not want to stay in the nursing profession 190 (54.44%). Even, from those who want to study in the future, only 160 nurses want to update themselves in the field of the nursing profession. Greater than half of the nurses who participate in this study are still with their first certificate of graduation (i.e. they have not updated their initial certificate of graduation to the next degree) 222 (63.61%). Less than a quarter of the nurses have registered as a membership of any nursing association 48 (13.75%). The proportion of nurses who have willingness to stay in nursing proportion is 54.44% (95% CI=0.491, 0.59) (Table 2).

# Believe in one's own professional autonomy among nurses

Some nurses do not have enough autonomy to make their own independent decision in their work. Regarding the question "I make my own decisions in regarding what is going to be done in my work,"112 (32.09%) and 115 (32.95%) of the participants are agreed and strongly agreed, respectively. A quarter of the nurses are strongly disagree that their own judgments remain final 176 (21.78%) (Table 3).

# Believe in self-calling for professionalism

Regarding showing of sense of self-calling for their profession, only around a quarter of the nurses are strongly agreed with the view "I really believe that this work is mine and I am striving for its development" 86 (24.64%). Again, for this idea of "I really believe that this work is mine and I am striving for its development," a few nurses are strongly disagreed 16 (4.58%).

For developments of the nursing profession, there must be a sense of self-calling for the nursing profession. But in this study, greater than a quarter of nurses do not have a good sense of self-calling for their nursing profession 125 (35.82%). More percent of the nurses are strongly agreed with the view "There is a penalty for the person who violates professional standards" 184 (52.72%) (Table 4).

# Factors associated with willingness of the nurses to stay in their profession

In this study to find factors associated with the willingness of the nurses to stay in the nursing profession among nurses, 15

#### Table 2. Characteristics of the nurses concerning their profession in the study area.

Variables	Options	Frequency	Percent
Willingness to stay in the nursing profession	Yes	190	54.44
	No	159	45.56
Increase their education level	Yes	127	36.39
	No	222	63.61
Member in nurse association	Yes	48	13.75
	No	301	86.25
Participate in update training	Yes	141	40.40
	No	208	59.60
Have you got adequate support among member	Yes	248	71.06
	No	101	28.94
Bothered from lack of material during work	Yes	258	73.93
-	No	91	26.07
Wish to stay in nursing professionalism	Yes	159	45.56
	No	190	54.44
Wish further education	Yes	339	97.13
	No	10	2.87
Which field do you want to learn	Nursing	160	47.20
	Other fields	179	52.80

Table 3. Believe in one's own professional autonomy among nurses.

Variables	Option	Frequency	Percent
I make my own decisions regarding what	Strongly disagree	22	6.30
is going to be done in my work	Disagree	18	5.16
	Neutral	82	23.50
	Agree	112	32.09
	Strongly agree	115	32.95
l know that my judgment on any matter	Strongly disagree	76	21.78
is the final judgment	Disagree	72	20.63
	Neutral	104	29.80
	Agree	58	16.62
	Strongly agree	39	11.17
I have much opportunity to exercise my	Strongly disagree	29	8.31
own judgment	Disagree	34	9.74
	Neutral	162	46.42
	Agree	76	21.78
	Strongly agree	48	13.75
My own decisions are not subject to	Strongly disagree	21	6.02
review by other peoples	Disagree	48	13.75
	Neutral	122	34.96
	Agree	99	28.37
	Strongly agree	16.91	16.91
I have no enforcing boss in almost every	Strongly disagree	17	4.87
work-related my scope of work	Disagree	16	4.58
	Neutral	43	12.32
	Agree	90	25.79
	Strongly agree	183	52.44

variables had candidate for multivariate logistic regression. In the final model of multivariate logistic regression, only 11 items have remained. From those 11 items, only 6 of them showed significant association. In this final finding, participating in training, experience, the status of autonomy, and showing sense of self-calling for nursing profession are significantly associated with willingness of the nurses to stay in the nursing profession. In this

Variables	Option	Frequency	Percent
l have a real "calling" for my work	Strongly disagree	25	7.16
- ·	Disagree	15	4.30
	Neutral	79	22.64
	Agree	117	33.52
	Strongly agree	113	32.38
There are penalties for the person who violates professional standards	Strongly disagree	16	4.58
	Disagree	28	8.02
	Neutral	51	14.61
	Agree	70	20.06
	Strongly agree	184	52.72
I would stay in the nursing profession if my income increase	Strongly disagree	24	6.88
	Disagree	20	5.73
	Neutral	132	37.82
	Agree	85	24.36
	Strongly agree	88	25.21
The dedication of people in this field is most gratifying	Strongly disagree	14	4.01
	Disagree	30	8.60
	Neutral	69	19.77
	Agree	107	30.66
	Strongly agree	129	36.96
l believe that this work is mine and I am striving for its development	Strongly disagree	16	4.58
- •	Disagree	42	12.03
	Neutral	112	32.09
	Agree	93	26.65
	Strongly agree	86	24.64

 Table 4. Showing sense of self-calling for their nursing profession among nurses.

case, those nurses who have stayed in the nursing profession for greater than 6 years are 54% less likely to wish to stay in the nursing profession than those who have stayed in less than 6 years (AOR=0.46 (95% CI=0.26, 1.81)). Regarding getting support from the colleagues, those who have not get support from his staff members are 99% less likely to wish to stay in nursing profession (AOR=0.10 (95% CI=0.05, 0.22)). Those nurses who have good autonomy regarding their works have 59% less likely wish to stay in the nursing profession than those who have poor autonomy (AOR=0.41 (95% CI=0.23, 0.70)). Again, the finding showed that those nurses who have feeling of self-calling for the nursing profession are 2.85% more likely wish to stay in the nursing profession than their counterparts (AOR=2.85 (95% CI=1.64, 4.97)) (Table 5).

# Discussion

Since the discovery of nursing as profession, experienced nurses are shifted from their profession to other fields of work.<sup>1,2,3,13,22–24</sup> Willingness of nurses to stay in nursing profession is nurses stay in nursing profession without having intention to shift their works to other profession. The aim of this study was to assess the willingness of nurses to stay in the nursing profession and associated factors. The finding will help by finding the clue why nurses are not having the

willingness to stay in their profession. Unless experienced nurses are staying in the nursing profession, it is difficult to update the nursing profession and provide quality of care. This finding gives the hint for concerned stakeholders to create a means to stay experienced nurses in their profession of nursing.

Regarding willingness status, the proportion of nurses who have the willingness to stay in the nursing proportion in this study was 54.44% (95% CI=0.491, 0.59). This finding is higher than studies conducted in Greece (34.53%) and China (41.3%).<sup>3,22</sup> This discrepancy may be due to nurses from developing countries have no more chance to do other work rather than stay in it. But in developed countries, nurses can shift their works to other site. This means in developed countries there is a chance to get other job that differs in case of nurses from developing countries such as Ethiopia.

But this finding is in line with study conducted in the Jimma Zone Public Hospitals of southwest parts of Ethiopia in which 57.75% of the nurses have the willingness to stay in the nursing profession.<sup>1</sup> This similarity may be due to those two areas are being from the same region of Ethiopia in which those institutions are being funded, manage, and followed by the same organization. In this case, all nurses in this site have the same characteristics regarding the nursing profession. Again this research finding is higher than study conducted in the Amara regional state of Ethiopia in which only 39.8% of

Table 5. Bivariate and	l multivariate analyses	of factors associated	l with nurses' willir	ngness to stay in their p	profession.

Characteristics		Wish to stay in nursing profession		COR (95% CI)	AOR (95% CI)	p-value
		Wish N	Not wish			
Sex	Male	94	92	I		
	Female	65	98	1.54 (1.00, 2.35)	1.54 (0.90, 2.64)	0.114
Marital status	Single	49	54	I		
	Married	132	97	1.49 (0.93, 2.39)	0.87 (0.48, 1.59)	0.668
	Widowed/divorced	9	8	1.23 (0.44, 3.46)	1.58 (0.42, 5.9)	0.489
Wish to get further education	Yes	75	52	1.56 (1.02, 2.39)		
	No	115	107	0.74 (0.47, 1.15)	0.73 (0.41, 1.30)	0.297
Monthly salary	<5072	80	77	I		
	≥5072	110	82	1.29 (0.84, 1.97)	1.81 (1.05, 3.11)	0.03*
Have you got adequate support	Yes	77	171	I		
among member	No	82	19	0.10 (0.05, 0.18)	0.10 (0.05, 0.22)	<0.01*
Participate on training	Yes	40	101	I		
	No	119	89	29 (0.18, 0.46)	0.49 (028, 0.86)	0.013*
Have you suffered to get	Yes	100	158	I		
necessary material in your work	No	59	32	0.34 (0.20, 0.56)	1.04 (0.51, 2.12)	0.907
Experience in a year	≥6	97	117			
	<6	62	73	97 (0.63, 1.50)	0.46 (0.26, 1.81)	<0.01*
Member in any nursing	Yes	24	24	I		
association	No	135	166	1.22 (0.66, 2.26)	1.56 (0.69, 3.51)	0.282
Status of autonomy in their	Poor	112	76	I		
profession	Good	78	83	0.63 (0.41, 0.97)	0.41 (0.23, 0.70)	0.001*
Self-calling for nursing	Poor	53	72	I		
profession	Good	137	87	2.13 (1.37, 3.33)	2.85 (1.64, 4.97)	<0.01*

COR: crude odds ratio; AOR: adjusted odds ratio.

\*The values show significant association.

nurses have the willingness to stay in the nursing profession.<sup>2</sup> This discrepancy may be due to being in different regions in which the organizations that manage them are different. Again in this study, since the data are collected during the eruption of COVID-19, many nurses have gotten three times double their salary and do not want to leave the nursing profession.

Concerning associated factors for the willingness of nurses to stay in the nursing profession, this research finding revealed that presence of support among colleagues is important for the retention of the nurses in the nursing profession. This finding is in line with study conducted in a research conducted in the southwest and northern parts of Ethiopia in which adequate communication among healthcare workers is good for retention of nurses in the nursing profession.<sup>1,2</sup> This may be due to if there is harmonious relationship and supportive environments, it attracts the nurses to stay in nursing profession. If there is no supportive, communicative, and harmonious relationship, it is difficult to stay in one's profession. Therefore, it is better to create conducive supportive environments among nurses colleagues.

Also, monthly salary has a direct relationship with the wishes of the nurses to stay in the nursing profession. In this case, nurses who have got relatively high salary are having the willingness to stay in the nursing profession. This finding is supported by study findings in Greece, southwest parts of Ethiopia in Jimma Zone, in hospitals of the Amara regional state of Ethiopia.<sup>1–3</sup> This is related with satisfaction of gaining money. Getting high money may help the nurses to fulfill needs arise from the life. If nurses relatively get high money, they have high probability to stay in the nursing profession. If the quality of healthcare given by nurses is needed, it is better to increase monthly salary of the nurses.

This research finding also revealed that getting training regarding to nursing care is related with willingness of the nurses in nursing profession. This finding is also supported with study conducted in Greece.<sup>3</sup> Those who have gotten training have a wish to stay in the nursing profession. Therefore, there have to be a means of giving training for the nurses to attract them to stay in the nursing profession.

Nurses have a different year of work experience. In this research, nurses who have stayed in nursing for less than 6 years have less willingness to stay in the nursing profession. This research finding is similar with studies conducted in Greece and the Amara regional state of Ethiopia.<sup>2,3</sup> This may be due to the fact that those who have stayed in the nursing profession for relatively a few years are younger and they have a wish to learn in other fields of study. Again those who have stayed for greater years in hospitals have relatively

got adequate salary that initiates them to stay in nursing profession. Therefore, there have to a means of increasing nursing salary or create means of getting incentives for the nurses to maintain them in nursing profession.

Nurses have different autonomy during conducting their works. In this case, nurses who have good autonomy are less likely to wish to stay in the nursing profession. This finding is again in line with study conducted in the Netherlands and Amara regional state of Ethiopia.<sup>2,23</sup> If the nurses have good autonomy in their works, they have a high intention to learn more in other fields of study (this is what is commonly visible in Ethiopia in which high scorer nurses are shifted from the nursing profession to other fields of study).

Regarding having a sense of self-calling for the nursing profession, this research finding showed that nurses who have a sense of self-calling for the nursing profession have high willingness to stay in the nursing profession. This finding is in line with a study conducted in Beni-Sueif city of Egypt.<sup>17</sup> So to increase the willingness of the nurses to stay in the nursing profession, it is must to increase a sense of self-calling for the nursing profession among nurses.

# Conclusion

The willingness of the nurses to stay in the nursing profession in the study area is very low. Getting training, salary level, year of experience, having a sense of self-calling for the nursing profession, presence of supports among colleagues, and nursing autonomy in their works are related with the willingness of the nurses to stay in the nursing profession.

# Recommendation

To bring development in the nursing profession, it is a must to stay experienced nurses in the nursing profession. Therefore, to increase the willingness of nurses in the nursing profession, it is better to increase the salary of the nurses, giving frequent training for the nurses, initiate the nurses to support one another, and encourage the nurses to have a sense of self-calling for the nursing profession. This is accomplished if there is a harmonious relationship between the government, nurses, and other stake holders in the healthcare delivery system.

#### Implications for nursing management

To bring development in the nursing profession, it is recommended to encourage maintaining experienced nurses in their profession. To maintain this, nurses' managers and healthcare team managers have to act on those identified factors and struggle to improve those identified factors to create conducive environments for the nurses. This research has identified barriers for nurses to stay in their profession. The nurse manager and concerned body have to act on those identified barriers and create means of maintaining the nurses in their works.

# Limitation of the study

This research was a quantitative study, and it has some limitations to identify whether nurses are having the willingness to stay in the nursing profession or not. Again since this research is almost the first one to be conducted in the study area, and even as Ethiopia, it has no adequate previous finding to make the discussion easy. Again this research did not consider the issue of COVID-19, during this data collection.

#### Authors' Note

Misganu Teshoma Regasa is now affiliated to Department of Midwifery, School of Nursing and Midwifery, Wollega University, Nekemte, Ethiopia; Getahun Fetensa is now affiliated to Department of Health, Behavior, and Society, Institute of Health, Faculty of Public Health, Jimma university, Jimma, Ethiopia and Dereje Chala Diriba is now affiliated to School of Nursing, The Hong Kong Polytechnic University, Hong Kong.

#### Acknowledgements

The authors express their heartfelt thanks to Wollega University for supporting them to conduct this research.

#### **Authors' contributions**

For this study, D.M. created the design, analysis finding, and prepared manuscript for this research. T.T. highly participated in writing result. B.W., D.C.D., R.T., A.O., L.B., A.M., M.B., G.F., W.E., and T.A. were involved in revising this research finding. Finally, all authors approved the final manuscript of this research.

### Availability of data and materials

The source of the data is available at corresponding author and upon reasonable requested by concerned individuals it can be provided.

#### **Declaration of conflicting interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### Ethical approval

Ethical approval for this study was obtained from the ethical review committee of Wollega University, Institute of Health Sciences (with reference number of Nurs/176/2020).

#### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

#### Informed consent

Verbal informed consent was obtained from all subjects before the study. Ethical review committee of Wollega University, Institute of Health Sciences approves that verbal informed consent was appropriate for this study. The confidentiality of the information was maintained by omitting the names and personal identification. The anonymity and confidentiality of the responses were protected. The question was asked after the nurses' voluntary has been obtained.

# **ORCID** iDs

Diriba Mulisa D https://orcid.org/0000-0002-0453-1998 Tadesse Tolossa D https://orcid.org/0000-0002-7936-9024 Misganu Teshoma Regasa D https://orcid.org/0000-0002-4935 -7700

Werku Etafa D https://orcid.org/0000-0001-9576-8888 Getahun Fetensa D https://orcid.org/0000-0003-1676-1050 Ebisa Turi D https://orcid.org/0000-0001-7951-0844 Getu Mosisa D https://orcid.org/0000-0001-5337-7512

#### Supplemental material

Supplemental material for this article is available online.

#### References

- Gizaw AB, Lema TB, Debacho WW, et al. Intention to stay in nursing profession and its predictors among nurses working in Jimma Zone Public Hospitals, South West Ethiopia. *J Nurs Care* 2018; 7(1): 440.
- Engeda EH, Birhanu AM and Alene KA. Intent to stay in the nursing profession and associated factors among nurses working in Amhara regional state referral hospitals, Ethiopia. *BMC Nursing* 2014; 13: 24.
- Potira S, Siskou O, Spinthouri M, et al. Factors influencing nurses' intention to leave their profession in the midst of the economic crisis in Greece. *Adv Pract Nurs* 2019; 4(1): 100054.
- Izumi S, Baggs JG and Knafl KA. Quality nursing care for hospitalized patients with advanced illness: concept development. *Res Nurs Health* 2010; 33(4): 299–315.
- Blegen MA, Vaughn TE and Goode CJ. Nurse experience and education: effect on quality of care. *J Nurs Adm* 2001; 31(1): 33–39.
- The University of Texas at Arlington Academic Partnerships. The importance of increasing education in nursing, 2019, https://academicpartnerships.uta.edu/articles/healthcare/ importance-of-increasing-nursing-education.aspx
- del Carmen Ortega-Navas M. The use of new technologies as a tool for the promotion of health education. *Soc Behav Sci* 2017; 237: 23–29.
- Hassmiller S, Butler AS, Schultz AM, et al. The future of nursing: leading change, advancing health. Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing, at the institute of medicine, https:// www.ncbi.nlm.nih.gov/books/NBK209880/pdf/Bookshelf\_ NBK209880.pdf
- United Nations. Goal 3. Ensure healthy lives promote wellbeing for all at all ages, 2015, https://sdgs.un.org/goals/goal3

- Akachi Y, Tarp F, Kelley E, et al. Measuring quality-of-care in the context of sustainable development goal 3: a call for papers. *Bull World Health Organ* 2016; 94: 160–160A.
- Nursing Times. Frontline nurses are key to ensuring quality care, 2009, https://www.nursingtimes.net/archive/frontlinenurses-are-key-to-ensuring-quality-care-12-06-2009/
- Yurumezoglu HA and Kocaman G. Predictors of nurses' intentions to leave the organisation and the profession in Turkey. *J Nurs Manag* 2016; 24(2): 235–243.
- Flinkman M, Isopahkala-Bouret U and Salanterä S. Young registered nurses' intention to leave the profession and professional turnover in early career: a qualitative case study. *Hindawi* 2013; 2013: 916061.
- Hammond PV and Davis BL. From idea to graduation: the evolution of the first PhD program in a HBCU. *ABNF J* 2005; 16: 112–117.
- ICAP. The global nurse capacity building program. *Producing maintaining a skilled nursing workforce in Ethiopia*, 2018, https://icap.columbia.edu/wp-content/uploads/NEPI-Ethiopia -Brief.LR\_.single\_19Sept2017.pdf
- Alebachew A and Waddington C. Improving health system efficiency: Ethiopia: human resources for health reforms, Editor. 2015. Addis Ababa, Ethiopia: World Health Organization.
- Ahmeda RM, Abdelwahabb EA and Elguindyc H. Staff nurses' intention to leave nursing profession and their organizational commitment in selected hospitals at Beni-Sueif city. *Egypt Nurs J* 2017; 14: 17–24.
- Bell M and Sheridan A. How organisational commitment influences nurses' intention to stay in nursing throughout their career. *Int J Nurs Stud Adv* 2020; 2: 100007.
- Advisory Board. The top 5 reasons why nurses quit their jobs, 2021, https://www.advisory.com/en/daily-briefing/2021/03/11 /nurse-burnout
- Tola MD, Tafesa F and Siranch Y. Assessment of professionalism in nursing and factors associated among nurses working in Arsi zone public hospitals, Oromia, Ethiopia, 2018, https:// www.medrxiv.org/content/10.1101/2020.09.28.20202986v1. full.pdf
- Rabie T. Construct validity and internal consistency of hall's professionalism Scale: tested on South African nurses. *BMC Res Notes* 2019; 12(1): 486.
- Wang L, Tao H and Ellenbecker CH. Predictors of hospital nurses' intent to stay: a cross-sectional questionnaire survey Shanghai, China. *Int Nurs Rev* 2012; 59: 547–554.
- Tummers LG, Groeneveld SM and Lankhaar M. Why do nurses intend to leave their organization? A large scale analysis in long term care. *J Adv Nurs* 2013; 69: 2826–2838.
- 24. Chin W, Guo YL, Hung YJ, et al. Workplace justice and intention to leave the nursing profession. *Nurs Ethics* 2019; 26(1): 307–319.