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Original Article

Employment status and associated factors of Pharma College Hawassa Campus graduates of 2017 to 2020: A cross-sectional study

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Abstract

Background: Graduate employability is becoming a major concern for governments, development-oriented organizations and higher learning institutions both in developed and in developing countries including Ethiopia. There are varied types of factors that determine whether young graduates will be able to find work, and earning potential. Although many scholars have worked hard by analyzing the employment status of college graduates most of them were focused on public higher education institutions, without considering private educational institutions. Therefore, this study aimed to assess the employment status and associated factors of Pharma College graduates from 2017 to 2020.

Methods: Cross-sectional study was conducted among randomly selected 246 Pharma college graduates. A simple random sampling technique was used to select study participants. Data were collected through telephone interviews and google forms by 10 trained first-degree holders using a pretested online questionnaires. The collected data were entered using Epi data and exported to SPSS for analysis. Bivariable and multivariable binary logistic regressions were performed to identify factors associated with the employment status of graduates. Statistical significance was determined using a p-value of less than 0.05 at a 95% confidence interval (CI) and adjusted odds ratios.

Result: In this study, the employability status of Pharma College Hawassa Campus graduates was found to be 73.2% (95% CI: 67.3-78.7). Year of graduation 2017 (AOR: 30.88; 95%CI: 4.23-225.48) and 2019 (AOR: 6.96; 95% CI: 2.16-24.44) were positively associated with graduates employability status. Whereas, CGPA of 2–2.74 (AOR: 0. 006; 95% CI: 0.001-0.05) and CGPA of 2.75–3.24 (AOR: 0.19; 95% CI: 0.04-0.88) and health officer field of study (AOR: 0.15; 95% CI: 0.03-0.67) were found to be negatively associated with employability

status of Pharma College Graduates.

Conclusion: Although the majority of Pharma College graduates have been employed in different sectors, factors like the field of study, year of graduation, and CGPA were found to be significantly associated with employability. Therefore, the college should work on enhancing student's relationship with parents, lecturers and senior students to work in peers, providing training on good techniques of study, answering and questioning in the classroom and effective time management to improve the students' grade point average (GPA). Moreover, further research has to be conducted to assess the graduate market saturation point for health officer field of study.

***Keywords**:* Employment status, graduate employability, graduate tracer study, Ethiopia

Introduction

An employability study (tracer study) is an approach used by higher education institutions to assess the relevance of higher education and collect other valuable information from the graduates (1). Graduate employability is an individual's capacity and willingness to become and remain attractive in the labor market (2). It is becoming a major concern for governments, development-oriented organizations and higher learning institutions both in developed and in developing countries including Ethiopia. Although higher education's assessment is based on its ability to open ways to the graduates for future business and the foundation of their reasonable vocation, the current trend is not in line with these requirements (3).

According to the United Nations Sustainable Development Report, in 2018, the global unemployment rate was 5% and more than one-third of employed workers in sub-Saharan Africa were living on less than $1.90 a day (4). In developed countries such as Canada and USA, 57% and 80.7% of graduates were able to be employed within 2 years (5) and 6 months (6), respectively. The problem of graduate unemployment has continued to increase globally and remained extremely high in developing countries despite the concerted efforts by the national and international development agencies to reduce the level of unemployment(7–9). In Ethiopia, higher education enrolment increased from around 34,000 in 2000 to almost 900,000 in 2018(10). Even though there is a rapid expansion of higher education institutions in the country, improving employability status is one of the key concern as it had been revealed with a 2.79% of unemployment rate for the 2020, which is a 0.75% increase from 2019 (11). In this regard, a tracer study conducted at Bahir Dar University graduates revealed an employability rate of 79% (12), whereas at Debre Markos University an employability rate of 57.6% had reported.

It is not only the graduates, but also family members, and societies could also be affected by the unemployment of graduates (13). Evidence showed that the rise in the unemployment rate could lead to the enhancement of risks of violence and social tensions both in the communities and for the government (14). Direly, the social and political consequences of having a large unemployment rate among new graduates are grave for the country (15). Due to this reason, handling the issue of graduate unemployment has become a basic concern that requires the attention of scholars (13,16).

There are varied types of factors that determine whether young people will be able to find work, and earning potential of graduates (17). Of these factors, lack of soft and entrepreneur skills development, and poor quality of education, and training are the frontrunner factors (18,19). Likewise, factors like the status and the capacity of higher education institutions to provide consultancy services to the students, disparity of knowledge, attitude and skills of graduates, and employers' demands are also found to be the commonest reasons for the observed rise of un-

employability (20). On the other hand, graduates personal factors such as discipline, achievement, gender, residence, family background, and job searching skills has influenced their employment status (21–23). Although self-employment could be the means of minimizing the unemployment rate; a shortage of finance have been one of the major constraints for many graduates, particularly in developing nations (24).

Despite the presence of promising actions towards addressing the unemployment status of graduates in Sub-Saharan African countries through strong support for establishing small-scale enterprises, and continual capacity-building training to develop entrepreneurial skills, the exact figure of the unemployment rate had not been known yet. Although many scholars have worked hard by analyzing the employment status of college graduates (12,25,26) most of them were focused on public higher education institutions, without considering private educational institutions (27). Therefore, this study aimed at assessing employment status of Pharma College graduates and its associated factor.

Material and methods

Study design, setting, and period

A cross-sectional study was conducted at Pharma College Hawassa Campus, which is one of the pioneer private higher institutions for more than 18 years in the former South Nations, Nationalities People Region (SNNPR) and now in Sidama Regional State from May 1 – June 15, 2022. The College campus is located in Hawassa city. The college is offering five undergraduate and three postgraduate programs in health and business fields. In 2020/2021 academic year, around 3,167 undergraduate and postgraduate students were enrolled, of these 2134 were health sciences students and 1033 of them are social science students. Likewise, the college registrar's office report revealed that more than 2000 students graduated in the last three years from different departments.

Population, sample size determination, and sampling procedure

All Pharma College Hawassa Campus graduates from undergraduate programs during 2017 to 2020 were the source population, whereas all randomly selected undergraduate students who graduated from 2017 to 2020 were our study population. Students with incomplete biographic information and contact address and who enrolled to upgrade from diploma level with the sponsorship of the government were excluded from the study. The sample size was calculated using Epi Info version 7 statistical software by considering the following assumptions: Proportion (79%) of surveyed graduates were employed from the study conducted at Bahir Dar University (12), 4% marginal of error (d) and 95% confidence interval (Z=1.96). Accordingly, the calculated sample size was 205. Considering 20% for the potential non-response rate, the final sample size became 246**.**

First, all the undergraduate students who graduated in the last four years were stratified into two strata, namely Health and Business faculties. Then based on the data obtained from the College's registrar's office sampling frames were developed for each faculty separately. Subsequently, the sample size was allocated for each stratum proportionally considering the total number of students who graduated in the last four years. Finally, a simple random sampling technique was employ to select our study subjects by using OPENEPI software version 3.03 to generate a random numbers. There were 721 and 422 Health and Business Faculty regular students who graduated over the past four-years period, respectively. Of these 164 were pharmacy graduates, 287 were nursing, 270 were public health, 392 were accounting and 30 were business management graduates. Then, based on proportional allocation, the sample size was

distributed to each department (Figure 1).

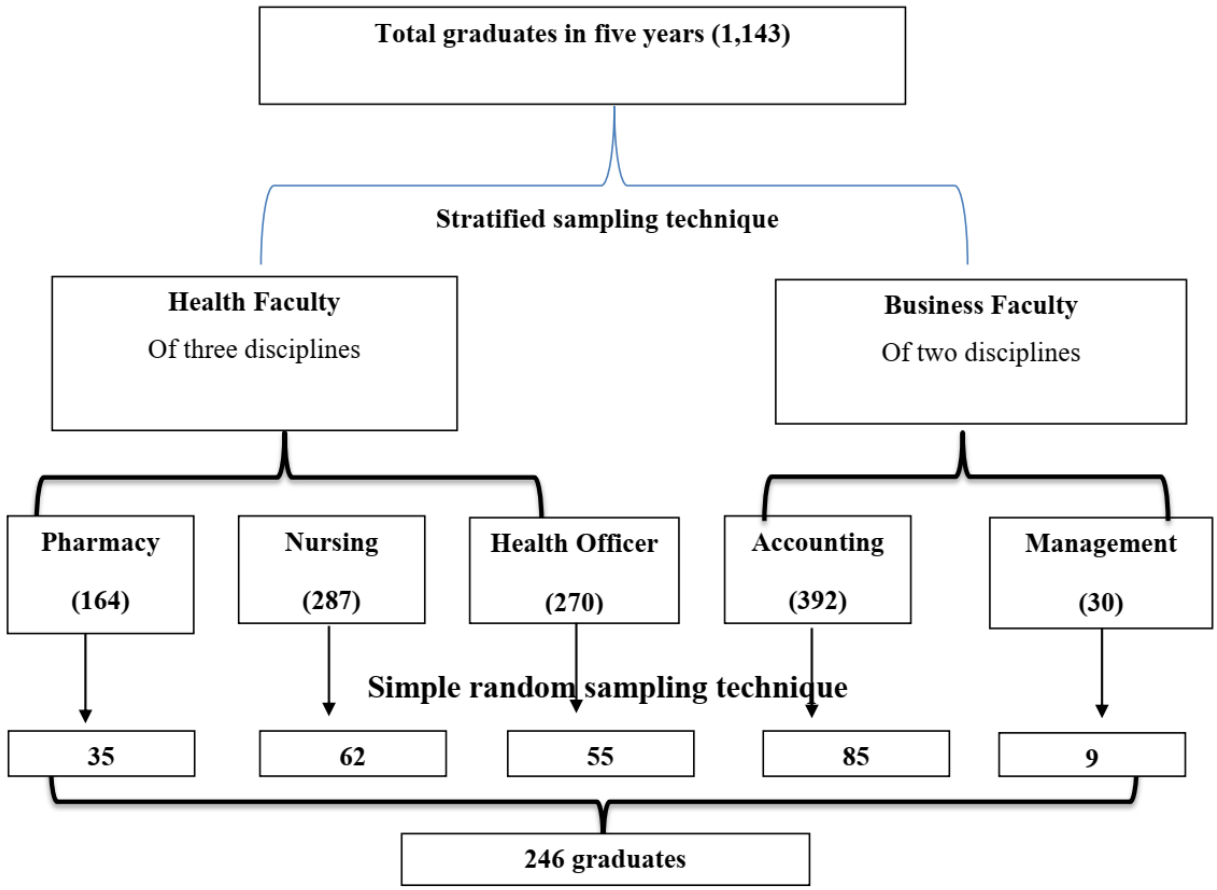

Figure 1: Sampling procedures for selecting 246 Pharma College graduates from 2017 to 2020 years

Data collection tools techniques and quality assurance

Pretested and structured questionnaire, which was adapted from prior published articles in peer-reviewed journals, and the Ethiopian Ministry of Education prepared nationally for all Ethiopian universities to conduct tracer studies was used to collect the data (12,25,26). Data were collected through telephone interviews and questionnaires designed in Google forms. Ten college staff (six for health and four for business faculty data collectors) and four investigators participated in the data collection and supervision, respectively. Following one-day of training the data collectors started to collect the data through a telephone interviews and online Google forms. Then after, every day, the data collectors, and principal investigators were meeting at the college Continuous Professional Development (CPD) center training hall to discuss the daily data collection process, and to check the completeness and consistency of the collected data. The data collectors trained for one day on issues like how to communicate with the study participants, and how to maintain smooth communication throughout the data collection process to attain common understandings as well as make to internalize the context of each question found in the checklist. Furthermore, the

investigators assessed the quality of data during the analysis stage to verify the completeness of the collected data.

Study variables and operational definitions

The dependent variable of this study was employment status (Yes or No). The independent variables were; socio-demographic factors: Sex, age at graduation, religion, marital status, residence, parents' education, and parents' occupation; personal factors: communication skills, computer & IT skills, intension to start master's degree, field of study, preference on the field of study, cumulative grade point average, and graduates perceived rank of their depth of knowledge of field of study; college-related factors: level of graduate satisfaction in the academic programs and college: library services, research emphasis in the teaching-learning, students' performance assessment, students support services, graduate's compliance to the knowledge required by the world of work, and short-term training. Employment refers to persons who during a specified brief period such as one week or one day, performed some work for wage or salary in cash or in kind or who had a formal attachment to their job but were temporarily not at work during the reference period, performed some work for profit or family gain in cash or in kind, and were with an enterprise such as a business, farm or service but who were temporarily not at work during the reference period for any specific reason and unemployment is someone without work, available for work, and seeking work (26).

Data processing and analysis

Data was assessed for completeness and consistency. Subsequently, the data were coded, entered into Epidata version 4.6.0.2 software and then exported to the Statistical Package for Social Science (SPSS) IBM for analysis. Descriptive statics were run using percentages for categorical data and mean with standard deviation for continuous variables. Text, tables, and graphs were used to present the data. Bivariable and multivariable binary logistic regression were run to identify the factors affecting the employment status of the students. Variables with p-value less than 0.25 during bivariable analysis were identified as candidate variables for multivariate analysis to control confounding variables. Multicollinearity between independent variables was checked by using the variance inflation factor (VIF), and it was less than 10. The reliability of the tool was checked by Cronbach's alpha (α =0.92). Adjusted odds ratio (AOR) with 95% confidence interval and p-value <0.05 were be used to declare statistical significance.

Results

Socio-demographic and academic background of graduates

Of all the sampled respondents, 224 filled and resubmitted the questionnaire properly making the response rate 94.9%. In this study, the majority of the respondents (66.5%) were females and more than half (54.5%) were found in the age group of 20-24 years. Considering their current educational status, one in ten (10.3%) of the respondents had MSc/MA. Of the total study participants, 31.7% and 25.9% attended accounting, and nursing fields of study, respectively. Regarding their field of study preference, almost all have responded that they have attended their field of choice. Regarding graduates' cumulative grade point average, only 15.2% had scored ≥3.75 CGPA (Table 1).

Communication, research, planning, and computer skills

More than half of the respondents, 115(51.3%), possess very high oral communication skill in the job-related issues. The mean (±SD) graduates personal reflection of their oral communication skill on job related matters was found to be 4.09 (±1.10). However, the mean (±SD) of graduate's

personal reflection on their writing skill was found to be 2.62 (±0.87). Remarkably, more than half, 120 (53.6%), of the respondents had low personal reflection on their writing skill. Similarly, 93 (41.5%) of the respondents have low basic computer skills with mean (±SD) of 2.85 (±0.92) (Table 2).

Table 1: Socio-demographic and academic background of Pharma College Graduates of 2017-2020

Variables	Options	Frequency	Percentage (%)
Age at graduation (in years)	20-24	122	54.5
	25+	102	45.5
Sex	Male	75	33.5
	Female	149	66.5
Place of residence	Urban	99	44.2
	Rural	125	55.8
Current educational status	BA/BSc	201	89.7
	MA/MSc	23	10.3
Marital status	Never married	159	71
	Married	65	29
Mother's educational status	No formal education	53	23.7
	Primary	55	24.6
	Secondary	45	20.1
	Above secondary	71	31.7
Father's educational status	No formal education	31	13.7
	Primary	45	20.1
	Secondary	52	23.2
	Tertiary	96	42.9
Field of study	Pharmacy	33	14.7
	Health Officer	53	23.7
	Nursing	58	25.9
	Accounting	71	31.7
	Management	9	4
Preference of field of study	Yes	212	94.6
	No	12	5.4
Year of graduation	2009	27	12.1
	2010	33	14.7
	2011	57	25.4
	2012	107	47.8
CGPA	2-2.74	19	8.5
	2.75-3.24	110	49.1
	3.25-3.74	61	27.2
	≥3.75	34	15.2

Table 2: Communication, research, planning, and computer skills of Pharma College Graduates, 2017-2020

Questions	Frequency (%)					Mean
	Very low	Low	Fair	High	Very high	(±SD)
Personal reflection on their oral communication skill on job related manner	7 (3.1)	11 (4.9)	51 (22.7)	40 (17.9)	115 (51.4)	4.09 (1.10)
Personal reflection on writing skill	8 (3.6)	120 (53.6)	45 (20.1)	51 (22.7)	0	2.62 (0.87)
Personal reflection on your reading or speaking a foreign	5 (2.2)	12 (5.4)	56 (25)	70 (31.2)	81 (36.1)	3.94 (1.01)
Personal reflection on their basic computer skills?	6 (2.7)	93 (41.5)	57 (25.4)	64 (28.6)	4 (1.8)	2.85 (0.92)
Personal reflection on their research skill?	26 (11.6)	34 (15.2)	79 (35.3)	35 (15.6)	50 (22.3)	3.22 (1.27)
Personal reflection on their planning and organizational skill?	8 (3.6)	22 (9.8)	55 (24.6)	60 (26.7)	79 (35.3)	3.80 (1.23)

Graduates' self-reflection on their professional competency, depth of knowledge and on overall teaching and learning processes

The mean (±SD) satisfaction level on their professional competency was found to be 4.04 (±1.04). Likewise, the mean (±SD) satisfaction level on library service of Pharma College was found to be 3.92 (±0.94). The mean (±SD) satisfaction level on teachers' supply of teaching materials, on the provision of real world work and on collaborative learning or contact with fellow student's was found to be 3.92 (±0.96), 3.15 (±1.01) and 3.35 (±1.15) respectively (Table 3).

Employment status of the graduates

About three-in-four (73.2%; 95%CI: 67.3-78.7%) of study participants were found to be employed (Figure 2). Of the employed study participants more than seven-in-eight (89%) agreed that their present jobs are related to their undergraduate degrees. Written examination (87.5%), interview (67%), CGPA (66.5%), and practical examination (8.9%) were amongst the commonest criteria used by the employer organization to recruit the candidates. Our study found that the median (IQR) waiting time for employability was 5 (2-12) months, and the majority (44.2%) were employed within 2 to 6 months (Figure 3). On the other hand, more than half (57.14%) of the graduates used public advertisement as a method of job searching (Figure 4).

Trends in graduates' employability status

A Chi-square test (X^2) with 5% level of significance and degree of freedom of 3 was performed to assess the relationship between year of graduation and employability status of Pharma College graduates. Hence, χ^2 calculated (15.711) is greater than the χ^2 tabulated (7.815). This suggests that there is statistically significant (p-value=0.001) association between year of graduation and employability status of the

Table 3: Self-reflection on professional competency, depth of knowledge and overall teaching and learning processes among Pharma College Graduates of 2017-2020

Variables	Very dissatisfied No (%)	Dissatisfied No (%)	Neutral No (%)	Satisfied No (%)	Very satisfied (%)	Mean (±SD)
How do you rate your level of satisfaction with your professional competency?	7 (3.1)	19 (8.5)	11 (4.9)	107 (47.8)	80 (35.7)	4.04 (1.10)
What is your reflection on the depth of knowledge of your study?	5 (2.2)	3 (1.3)	43 (19.2)	106 (47.3)	67 (29.9)	4.01 (0.86)
How do you rate library services of Pharma College?	8 (3.6)	5 (2.2)	47 (21.0)	102 (45.5)	62 (27.7)	3.92 (0.94)
How do you rate performance assessment methods of Pharma College?	6 (2.7)	4 (1.8)	32 14.3)	136 (60.7)	46 (20.5)	3.95 (0.81)
How do you rate teachers' supply of teaching materials?	2 (0.9)	21(9.4)	38 (17)	95 (42.4)	68 (30.4)	3.92 (0.96)
How do you reflect orientation process during examination processes?	5 (2.2)	9 (4)	38 (17)	116 (51.8)	56 (25)	3.93 (0.88)
How rate academic advising offered in the college?	6 (2.7)	18 (8)	58 (25.9)	92 41.1)	50 (22.3)	3.72 (0.98)
How do you rate practical emphasis of teaching and learning?	7 (3.1)	11 (4.9)	45 (20.1)	105 (46.9)	56 (25)	3.86 (0.95)
How do you rate provision of real world work?	9 (4)	55 (24.6)	71 (31.7)	71 (31.7)	18 (8)	3.15 (1.01)
How do you rate collaborative learning or contact with student's fellow?	19 (8.5)	29 (12.9)	69 (30.8)	69 (30.8)	38 (17)	3.35 (1.15)

graduates. The share of graduate unemployment increased from 7.4% in 2017 to 36.4% in 2020. Conversely, the percent of employed graduates declined from 92.6% in 2017 to 63.6% in 2020 (Table 4).

Factors associated with graduates' employment status

During bivariable binary logistic regression variables like; educational status of mothers and fathers, marital status, gender , field of study, preferred field of study, year of graduation, CGPA resuls were found to be significantly associated with employment status of the graduates at p-value of <0.25. However, after controlling for the potential confounding variables by multivariate modeL, health officer field of study (AOR: 0.15; 95% CI: 0.03-0.67), year of graduation 2017 (AOR: 30.88; 95% CI: 4.23-225.48) and 2019 [AOR: 6.96; 95%CI: 2.16-24.44), CGPA of 2–2.74 (AOR: 0.006; 95% CI: 0.001-0.05), and 2.75–3.24 (AOR: 0.19; 95% CI: 0.04-0.88)] were found to be statistically significant factors of the employability status of Pharma College Graduates.

Accordingly, health officer graduates were 85% times less likely of being employed as compared to Pharmacy graduates. On the other hand, the

odds of getting employment among 2017 and 2019 years of graduates were 31 and 7 times more likely as compared to graduates of 2020, respectively. The odds of employment among graduates who had CGPA of 2–2.74 and 2.75–3.24 were 99.4% and 81% lower, respectively, as compared to those graduates who had CGPA of ≥3.75 (Table 5).

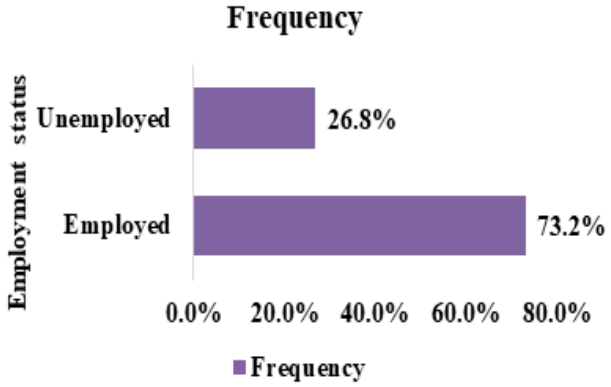

Figure 2: Employment status of graduates of mPharma College from 2017-2020

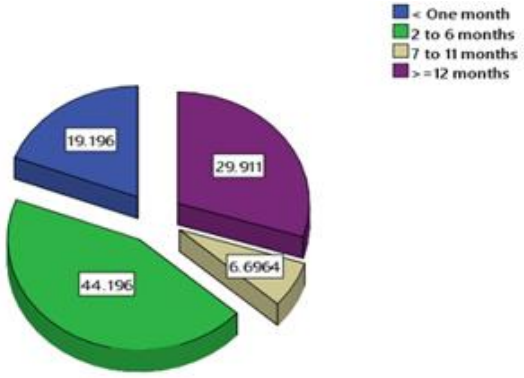

Figure 3: Length of waiting time for the first employment among graduates of Pharma College from 2017-2020

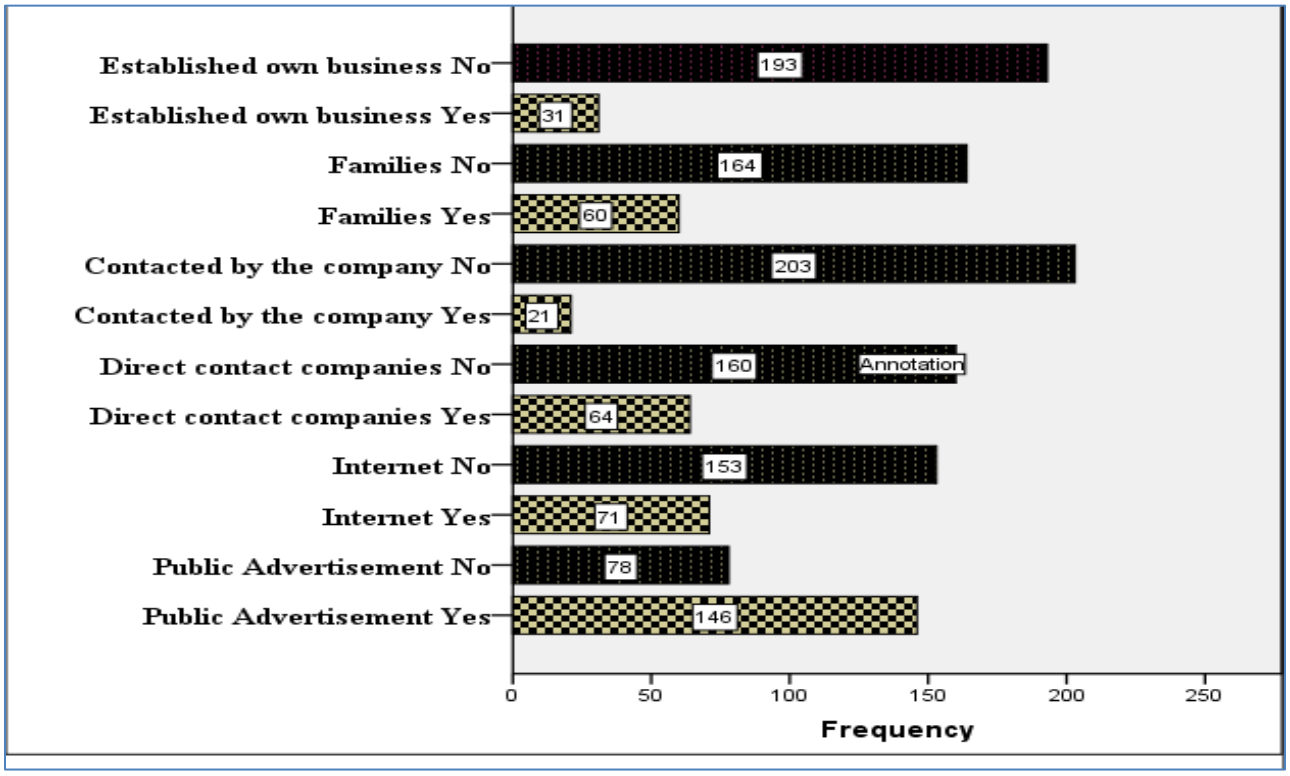

Figure 4: Methods of job searching of Pharma College Graduates of 2017-2020.

Table 4: Trends in Pharma College Graduate employability status, 2022

Year of graduation	Graduates	Employed # (%)	Unemployed # (%)	X^2 test	p-value
2017	27	25 (92.6%)	2 (7.4%)	7.815	
2018	33	22 (66.7%)	11 (32.3%)		
2019	57	49 (86%)	8 (14%)		
2020	107	68 (63.6%)	39 (36.4%)		

Table 5: Factors associated with employment status of Pharma College Graduates of 2017-2020

Variable		Employment status		COR(95%CI)	AOR(95%CI)
		Yes n (%)	No n (%)		
Gender	Male	53 (70.7)	22 (29.3)	0.82 (0.44-1.54)	0.77 (0.25-2.09)
	Female	111(74.5)	38 (25.5)	1	1
Marital status	Never married	111 (69.8)	48 (30.2)	0.52 (0.25-1.06)	0.74 (0.27-2.01)
	Married	53 (81.5)	12 (18.5)	1	1
Educational status of mothers	No formal education	43 (81.1)	10 (18.9)	2.96 (1.28-6.84)	1.35 (0.43-4.22)
	Primary	42 (76.4)	13 (23.6)	2.23 (1.02-4.87)	0.80 (0.26-2.48)
	Secondary	37 (82.2)	8 (17.8)	3.19 (1.30-7.84)	0.85 (0.25-2.83)
	>Secondary	42 (59.2)	29 (40.8)	1	1
Field of study	Pharmacy	28 (84.8)	5 (16.2)	1	1
	Health Officer	26 (49.1)	27 (50.9)	0.17 (0.05-0.51)	0.15 (0.03-0.67)***
	Nursing	46 (79.3)	12 (20.7)	0.68 (0.21-2.14)	1.52 (0.32-7.24)
	Account & mgmt.	64 (80.50	16 (20.0)	0.71 (0.23-2.14)	1.37 (0.30-6.06)
Year of graduation	2009	25 (92.6)	2 (7.4)	5.06 (1.11-23.13)	30.88 (4.23-225.48)**
	2010	22 (66.7)	11 (32.3)	2.70 (0.85-8.56)	1.83 (0.55-6.07)
	2011	49 (86)	8 (14)	9.96 (3.40-29.18)	6.96 (2.16-24.44)**
	2012	68 (63.6)	39 (36.4)	1	1
CGPA result	2–2.74	13 (68.4)	6 (31.6)	0.045 (0.01-0.20)	0.006 (0.001-0.05)***
	2.75–3.24	75 (68.2)	35 (31.8)	0.20 (0.05-0.72)	0.19 (0.04-0.88)*
	3.25–3.74	52 (85.2)	9 (14.8)	0.55 (0.14-2.23)	0.55 (0.11-2.62)
	≥3.75	31 (91.2)	3 (8.8)	**1**	**1**
Communication skill	Poor	81 (67.5)	39 (32.5)	0.52 (0.28-0.97)	0.53 (0.22-1.28)
	Good	83 (79.8)	21 (20.2)	1	1
Graduates satisfaction on college services	Low	88 (72.1)	34 (27.9)	0.60 (0.33-1.16)	1.01 (0.41-2.52)
	High	76 (74.5)	26 (25.5)	1	1

Discussion

In this study, the employment status of Pharma College Hawassa Campus graduates from 2017-2020 was found to be 73.2%. The result is in line with a study conducted at Bahir Dar University graduates (79%) (12). However, it is lower than a tracer study conducted at Debre Berhan University for which 91.1% of graduates are employed (26). On the other hand, this finding is higher than a study conducted at Debre Markos University 57.6% (25). The discrepancy might be due to the variations in the study period and the recent occurrence of COVID-19 epidemics. Additionally, this may be due to many university graduates being unable to be employed or underemployed for a prolonged period of time (21).

Of the factors which are found significantly associated with the employment of graduates, health officer graduates are 85% times less likely of being employed as compared to Pharmacy graduates. This might because the numbers of medical doctors are becoming progressively replacing the job positions, which had previously been occupied by health officers. Moreover, there is a significant relationship between the graduates' fields of specialization and their occupations after graduation (28).

Regarding year of graduation, 2017 and 2019 graduates had more chance of being employed than graduates of year the 2020. This may be because of economic activities and the employment rate reduction as a result of the COVID-19 pandemic (28). On the other hand, graduates who had CGPA of 2–2.74 and 2.75–3.24 had 99.4% and 81% reduced chance of employability, respectively, as compared to those graduates who have CGPA of ≥3.75. The result is consistent with the idea that states academic performance measured using CGPA is the key to the employability of business graduates(23,24). Moreover, this is also supported by a study among Bahir Dar University graduates where employability has a positive association with CGPA, preferred field of study, and internship practice(29).

The study considered only five disciplines; hence, the findings may not be generalized to all graduates. Moreover, relatively smaller sample size was used to estimate the employability of the graduates, which could affect the external validity of the study. Therefore, the findings of this study are not to be generalized to all graduates in Ethiopia.

Future studies have to consider long duration (minimum of 3 months) of data collection period for enhancing the response rate of the study. All the alumni should consider taking part in the study. On top of this, it is important to conduct further mixed type of researches as national graduate tracer studies that employ both the quantitative and qualitative methods.

Conclusion

The majority of Pharma College graduates have been employed in different sectors. This indicates that the college is contributing to the production of a working task force both in the area of health and business fields in its relevant programs. Regarding satisfaction, nearly half of the graduates are satisfied with the services provided by the college. Factors like the field of study, year of graduation, and CGPA were significantly associated with the employability of graduates. Therefore, the college should work on enhancing student's relationship with parents, lecturers and senior students to work in peers, providing training on good techniques of study, answering and questioning in the classroom and effective time management to improve the students' grade point average (GPA). Likewise, employability, communication, job searching, life skill, and job creation skills training is needed to graduate students before their graduation to increase the employment rate of graduates for better achievement and success.

Moreover, further research has to be conducted to assess the graduate market saturation point for health officer field of study.

Acknowledgments

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Ethical considerations

Primarily, Pharma College Research and Community Service Directorate Office approved the study. Data was collected after obtaining informed consent from the study participant. The Research and Community Service Directorate Office approved the study protocol. All the study participants were informed about the purpose of the study and their right to refuse and withdraw from the study at any time. All the procedures were performed per the Declaration of Helsinki. Moreover, information regarding any specific personal identifiers like the name of the participants was not collected, and confidentiality of any personal information was maintained.

Data Availability

Data is not available for online access. However, readers who wish to gain access to the data can write to the corresponding author.

Conflict of interest

The authors declared no conflicts of interest exist.

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