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RESEARCH ARTICLE

Evaluation of graduates of the Kafkas University Faculty of Veterinary Medicine in terms of several parameters

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Özet

Yiğit A, Aydın E, Cihan M. Kafkas Üniversitesi Veteriner Fakültesi mezunlarının bazı parametreler yönünden değerlendirilmesi.

Amaç: Bu çalışma, Kafkas Üniversitesi Veteriner Fakültesinden 1990-2011 yılları arasında mezun olan veteriner hekimlerin bazı parametreler yönünden değerlendirilmesi amacıyla gerçekleştirildi.

Gereç ve Yöntem: Mezuniyet yıllıklarına ait defterler ile mezun olan öğrencilere ait arşiv dosyaları incelenerek cinsiyet, doğum yeri, ortalama mezuniyet yaşı ve yılı bilgilerinin yer aldığı 22 yıllık (1990-2011) mezun profili çıkarıldı. Bu mezunların çalıştıkları yer ile çalışma alanı bilgileri, mezunlar ile yapılan görüşmeler ve internet erişiminden sağlandı.

Bulgular: Doğum yeri ile çalışma yeri arasında pozitif bir ilişkinin varlığı (n=634, %54.37), mezunların %84.10'unun kamu (Gıda Tarım ve Hayvancılık Bakanlığı) ve klinik hizmeti alanında çalışması ve işsiz veteriner hekimin olmaması dikkat çekicidir.

Öneri: Yüksek Öğretim Kurulu'nun veteriner hekimliği eğitiminde türe dayalı klinik yapılanmayı tartıştığı günümüzde, çalışma verileri doğrultusunda özellikle küçükbaş ve büyükbaş ağırlıklı hayvana sahip Doğu Anadolu Bölgesi'nde yer alan fakültenin, altyapı sorunları uygun hale getirildiği takdirde, bu türlere yönelik eğitim vermesi gerektiği söylenebilir.

Anahtar kelimeler: Kafkas Üniversitesi (KAÜ), mezun, veteriner hekimliği, veteriner hekimliği eğitimi

Abstract

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Aim: This study was conducted for the purpose of evaluating veterinary graduating of the Kafkas University Faculty of Veterinary Medicine between the years of 1990-2011 in terms of some parameters.

Materials and Methods: A 22 year profile of graduates (1990-2011) covering details on gender, place of birth, mean age and year of graduation was drawn-up by examining graduation yearbooks and archive files of graduated students. Information on the location of employment of these graduates and their field of employment were obtained through interviews with graduates and the Internet.

Results: There is a positive correlation between the place of birth and the location of employment (n=634, 54.37%), 84.10% worked in the public sector (Ministry of Food, Agriculture, and Livestock) and field of clinical service, and there were no unemployed veterinarians.

Conclusions: Today, the Council of Higher Education is discussing clinical structuring based on type and in line with the study data, it can be said that, in case the infrastructure problems of faculties in the Eastern Anatolian Region, with especially sheep, goat and cattle, are made suitable, there is a need to provide education oriented at these types.

Keywords: Kafkas University (KAU), graduate, veterinary medicine, veterinary medicine training

Introduction

Veterinary medicine education in a modern approach and military status was reported to have opened in 1842 in Turkey, and students started to be admitted to this military school for civilian services in 1881. Ankara University was founded in 1946, and veterinary medicine education was started to be provided under the Ankara University as a faculty for the first time in 1948 (Erk 1978). In line with the duties specified in the fifth article of the Law numbered 6343 and newly developing concepts, for the purpose of fulfilling veterinary medicine services, it is anticipated that the number of veterinaries in Turkey will reach 32.000 by the end of 2013 (Anonym 2010). According to the Student Selection and Placement (ÖSYS) Higher Education Programs and Placement Quota Manual published on July 3, 2013, admission quotas have been opened for education in 22 faculties including Cyprus (Near East University) and Kirghizstan (Manas University) and with the newly established faculties of veterinary medicine, the number of faculties has reached 28. The placement quota recognized for faculties providing education was 1.855 in 2012 and it increased to 1.984 in 2013 (including the quota for top students of schools) (ÖSYM 2013a-b). The faculties of veterinary medicine, the years they were established, and their admission quotas have been provided in Table 1.

Table 1. Admission quotas of faculties of veterinary medicine in Turkey in the 2012-2013 academic years.

Universities that including Faculty of Veterinary Medicine*	Year of establishment	Province of university	Quota (Person) 2012	2013	I/E/S***
University of Ankara	1948	Ankara	165	170	+/+/+
University of Fırat	1970	Elazığ	125	139	+/+/+
University of İstanbul	1972	İstanbul	135	139	+/+/+
University of Uludağ	1978	Bursa	125	129	+/+/+
University of Kafkas	1982	Kars	105	108	+/+/+
University of Selçuk	1982	Konya	155	159	+/+/+
University of Yüzüncü Yıl**	1982	Van	85	88	+/+/+
University of Dicle	1993	Diyarbakır	55	57	+/+/+
University of Adnan Menderes	1993	Aydın	75	77	+/+/+
University of Erciyes	1995	Kayseri	65	67	+/+/+
University of Mustafa Kemal	1995	Hatay	55	57	+/+/+
University of Harran	1995	Şanlıurfa	75	77	+/+/+
University of Kırıkkale	1995	Kırıkkale	60	72	+/+/+
University of Mehmet Akif Ersoy	1996	Burdur	85	88	+/+/+
University of Afyon Kocatepe	1997	Afyon	70	72	+/+/+
University of Ondokuz Mayıs	1997	Samsun	75	77	+/+/+
University of Gazi (Hitit)	1997	Çorum	-	-	-/-/-
University of Atatürk	1997	Erzurum	65	67	+/+/+
University of Marmara	1997	İstanbul	-	-	-/-/-
University of Balıkesir	2008	Balıkesir	35	36	+/+/+
University of Cumhuriyet	2010	Sivas	55	57	+/+/+
University of Bingöl	2012	Bingöl	-	52	+/+/+
University of Aksaray	2012	Aksaray	-	-	+/-/-
University of Namık Kemal	2012	Tekirdağ	-	-	+/-/-
University of Çukurova	2012	Adana	-	-	+/-/-
University of Siirt	2013	Siirt	-	-	+/-/-
Total			1770	1896	

*:Two universities applied for establishment veterinary medicine faculty (Ege and Pamukkale) and also there are two Universities (Manas-Kirghizistan and Yakın Doğu-Cyprus) including faculty of veterinary medicine that have placement by ÖSYM. **:Within the secondary education programme of Faculty quotas was 85 in 2012 and 88 in 2013. ***: I: Instructor, E: Education, S: Student

The KAÜ Faculty of Veterinary Medicine was established in 1982 under Ataturk University as a result of efforts initiated by *the Foundation for a Faculty of Veterinary Medicine in Kars* in the 1970s and with the *Statutory Decree on the Organization of Institutes of Higher Education numbered 41* promulgated according to the Higher Education Law '. With the opening of the Kafkas University in 1992, the faculty was affiliated to the Kafkas University and its first graduates graduated in the 1989-1990 academic year under Atatürk University (Kızıltepe 2006).

In the Turkish Veterinary Medicine Congresses (1998, 2002, 2010), reports were prepared on the problems of the profession and some activities (Özen and Ateş 2003a-b, Özen et al 2007, Özen et al 2012a-b-c) were conducted on problems experienced during veterinary medicine teaching and the practice of the profession. In the study of Özen and Ateş (2003a) and Özen et al (2012b) it was concluded that the awareness of selecting faculties of veterinary medicine was low. Ilgen et al (2003) conducted a study investigating the influence of some personal characteristics of students in faculties of veterinary medicine on their career preference. However, no detailed study determining the relation between demographic characteristics and field of employment and location of employment of professional individuals was encountered.

The study aimed to draw-up a profile of veterinaries graduating from the KAÜ Faculty of Veterinary Medicine and conduct an investigation of their fields of employment in terms of some factors.

Materials and Methods

The material of the study was constituted by the files in the Archive of the KAÜ Registrar's Office of students, enrolled at the faculty of veterinary medicine. File records were exami-

Table 2. Details on KAÜ Faculty of Veterinary Medicine Admission Scores, Admission Quotas, and Graduates

Parameters (Faculty)*				Graduates					
				Person ****					
Entry Year	Entry Score (Min/Max)	Achiever / Enrolling Students **	Unregistered / Transfer ***	Year	F	%	M	%	Total
1985	349.66 / 415.87	- / 49	3 / 6	1990	2	5.90	32	94.10	34
1986	368.17 / 421.93	- / 51	3 / 15	1991	2	6.70	28	93.30	30
1987	344.05 / 415.71	- / 52	7 / 14	1992	1	2.90	33	97.10	34
1988	393.86 / 428.36	- / 46	4 / 12	1993	4	12.90	27	87.10	31
1989	387.37 / 436.95	- / 49	5 / 6	1994	3	8.60	32	91.40	35
1990	404.79 / 448.04	- / 50	8 / -	1995	3	10.00	27	90.00	30
1991	352.57 / 411.66	- / 55	6 / 3	1996	4	10.30	35	89.70	39
1992	380.66 / 442.58	- / 56	4 / 4	1997	10	17.90	46	82.10	56
1993	401.77 / 458.63	- / 49	5 / 4	1998	6	12.50	42	87.50	48
1994	348.89 / 439.30	- / 52	9 / 4	1999	6	17.70	28	82.30	34
1995	352.12 / 453.03	- / 50	3 / 3	2000	7	18.00	32	82.00	39
1996	390.36 / 429.16	55 / 52	3 / 1	2001	15	31.90	32	68.10	47
1997	364.04 / 400.13	57 / 51	10 / -	2002	5	12.20	36	87.80	41
1998	338.11 / 378.56	78 / 75	6 / 2	2003	13	23.20	43	76.80	56
1999	158.89 / 180.05	104 / 104	17 / 2	2004	8	11.00	65	89.00	73
2000	163.32 / 173.57	104 / 104	9 / -	2005	7	11.10	56	88.90	63
2001	161.32 / 175.70	106 / 106	12 / 7	2006	7	8.30	77	91.70	84
2002	160.43 / 178.76	81 / 81	8 / 3	2007	1	1.90	52	98.10	53
2003	278.15 / 290.56	82 / 82	6 / 4	2008	4	4.90	77	95.10	81
2004	285.18 / 344.04	85 / 85	6 / 7	2009	4	4.60	83	95.40	87
2005	296.46 / 305.55	85 / 85	7 / 4	2010	3	3.10	94	96.90	97
2006	257.77 / 280.12	100 / 100	6 / 8	2011	8	10.80	66	89.20	74
Toplam					123		1043		1166

*: These data created by quotas of ÖSYM and archive records of KAÜ Regsitrar's Office **: Data related to students who are between years 1985-1995 not founded. ***: These data was created out of existing files in the archive of KAÜ Regsitrar's Office ****F: Female, M: Male

Table 3. Regional distribution of KAÜ graduate veterinaries.

Geographical regions	Birthplace of Veterinarians (I)		Work status of veterinarians in birthplace (II)		Regions of veterinarians worked*		Weighted employment areas**, ***
	Person	%	Person	((II/I)x100) (%)	Person	%	
Mediterranean	169	14.49	99	58.58	136	11.66	1,2,6
Eastern Anatolian	291	24.96	153	52.58	292	25.04	1,2,3
Aegean	136	11.66	85	62.50	145	12.44	2,1,6
Southeast Anatolian	87	7.46	52	59.77	86	7.38	1,2,6
Central Anatolian	182	15.61	91	50.00	161	13.81	1,2,3,6
Black Sea	211	18.10	100	47.39	165	14.15	1,2,4
Marmara	78	6.69	39	50.00	158	13.55	1,2,4
Abroad	12	1.03	15	125.00	15	1.29	7
Total	1166	100.00	634	54.37	1158	99.31	-

* 8 colleagues deceased **1 = Ministry of Food, Agriculture, and Livestock, 2 = Clinician, 3 = Academic staff, 4 = Municipal veterinarian, 5 = Other public sector (Ministry of National Education, Ministry of National Defence, Ministry of Health, Turkish National Police-Ministry of Interior), 6 = Other private sector (Drug-medical industry, Poultry industry, Meat and dairy industry, Veterinary consulting services, Jockey Club of Turkey, Company owner), 7 = Abroad, 8 = Decease. *** The frequency of the first three work areas are provided.

ned and classified according to years, and data was obtained for the findings. The Center of Student Selection and Placement (ÖSYM) was contacted and it was determined that there were data pertaining to the period between the years of 1996 and 2011 (number of admitted students, lowest and highest scores for admission to the faculty). The archives of the ÖSYM were reviewed for data pertaining to these years and concerned data were accessed. Data pertaining to the period prior to 1996 were formed by noting graduate, dropped-out, and transferred students one by one from files in the Archive of the KAÜ Registrar's Office. All graduates between the academic years of 1989-1990 and 2010-2011 were included in the study.

In order to be able to access data on the field of employment of graduates, interviews were conducted with graduates of various periods. Furthermore, data was collected through internet access of the personnel detail databases of the Ministry of Food, Agriculture, and Livestock (MFAL) (Anonym 2013).

The SPSS 20.0 statistics package program was utilized in the study. The descriptive statistics of the data was performed on the SPSS program and the Kruskal-Wallis test was utilized in the significance control of intergroup differences.

Table 4. The population, sheep and goat and cattle stock in Turkey in 2012 according to regions (TÜİK 2013).

Geographical regions	Population		Cattle assets		Ovine assets	
(number of provinces)	Number	%	Number	%	Number	%
Mediterranean (8)	9.611.007	12.71	1.224.840	8.80	4.809.693	13.44
Eastern Anatolian (15)	6.373.662	8.43	2.985.593	21.46	9.306.439	26.01
Aegean (8)	9.779.502	12.93	2.033.352	14.61	4.211.244	11.77
Southeast Anatolian (8)	7.491.491	9.91	902.823	6.49	5.259.637	14.70
Central Anatolian (13)	12.080.428	15.97	2.620.720	18.83	4.521.956	12.64
Black Sea (18)	7.547.841	9.98	2.345.346	16.85	4.823.510	13.48
Marmara (11)	22.743.453	30.07	1.802.238	12.95	2.850.040	7.96
Total	75.627.384	100.00	13.914.912	100.00	35.782.519	100.00

Table 5. Fields of employment of graduates between 1990-2011.

Working areas	Graduates between 1990-1996 (n=227)		Graduates between 1997-2003 (n=321)		Graduates between 2004-2011 (n=610)		All graduates* (n=1158)		P
	Person	%	Person	%	Person	%	Person	%	Value
MFAL (1)	98	43.17	159	49.53	331	54.26	588	50.78	0.007[b]
Clinic (2)	45	19.82	85	26.48	182	29.84	312	26.94	0.006[b]
University (3)	22	9.69	28	8.72	18	2.95	68	5.87	0.000[a]
Municipal (4)	19	8.37	13	4.05	22	3.61	54	4.66	0.016[b]
Other public (5)	9	3.96	3	0.93	6	0.98	18	1.55	0.007[b]
Other private (6)	27	11.89	28	8.72	48	7.87	103	8.89	0.230
Abroad (7)	7	3.08	5	1.56	3	0.49	15	1.30	0,013[b]
Total	227	100	321	100	610	100	1158	100	

*: 8 colleagues deceased. 1 = Ministry of Food, Agriculture, and Livestock, 2 = Clinician, 3 = Academic staff, 4 = Municipal veterinarian, 5 = Other public sector (Ministry of National Education, Ministry of National Defence, Ministry of Health, Turkish National Police-Ministry of Interior), 6 = Other private sector (Drug-medical industry, Poultry industry, Meat and dairy industry, Veterinary consulting services, Jockey Club of Turkey, Company owner), 7 = Abroad, a: p<0.001 is significant; b: p<0.05 is significant

Results

Details on the students that have enrolled at the KAÜ Faculty of Veterinary Medicine in the 1985-1986 and 2006-2007 academic years have been provided in Table 2.

According to the 2013 data of the ÖSYM, it can be observed that the lowest admission score to the KAÜ Faculty of Veterinary Medicine was 265.565 and the admission quota was 105 (Anonym 2013). Data on the distribution of places of birth and places of employment of graduates of KAÜ Faculty of Veterinary Medicine and their status of employment depending on their place of birth have been provided in Table 3.

Among the 1.166 veterinaries graduating from KAÜ Faculty of Veterinary Medicine between 1990 and 2012, 233 (19.98%) students are from the province of Kars (105 persons) and neighbouring provinces [Ardahan (42 persons), Iğdır (15 persons), Erzurum (54 persons), and Ağrı (17 persons)].

Data on the sheep and goat and cattle figures of 2012 in Turkey of the Turkish Statistical Institute (TÜİK) have been provided in Table 4.

Graduates of the KAÜ Faculty of Veterinary Medicine investigated under the scope of the study were separated into three

Table 6. Gender distribution of graduates between1990-2011.

Gender	Graduates between 1990-1996		Graduates between 1997-2003		Graduates between 2004-2011		Total		P Value
	Person	%	Person	%	Person	%	Person	%	(p<0.001)
Male	214	91.80	259	80.70	570	93.10	1043	89.50	
Female	19	8.20	62	19.30	42	6.90	123	10.50	0.000
Total	233	100	321	100	612	100	1166	100	

Table 7. Some findings pertaining to graduate students.

Parameters	Education period		
	Minimum	Maximum	Mean±Standart Deviation (X±SS)
Entry age to faculty	16	35	18.80±1.67
Graduation age	21	41	24.42±1.97
Education period of faculty	5	15	5.62±1.13

Table 8. Frequency (%) and significance table of field of employment according to regions.

Working areas*	Geographical regions (% Frequencies)							Mean	P
	A (%)	DA (%)	E**(%)	GDA (%)	İA (%)	K (%)	M (%)	(X) (%)	Value
MFAL (1)	50.00	51.00	41.40	68.60	54.70	57.00	44.30	52.43	0.011[b]
Clinic (2)	29.40	23.30	42.80	16.30	24.20	23.60	31.00	27.23	0.063
University (3)	2.90	18.50	0.70	2.30	3.10	0.60	0.60	4.10	0.000[a]
Municipal (4)	3.70	2.40	5.50	3.50	1.20	8.50	9.50	4.90	0.164
Other public (5)	0.70	0.60	0.70	2.30	5.00	1.20	1.30	1.69	0.235
Other private (6)	13.10	4.10	8.30	7.10	11.90	9.00	13.00	9.50	0.010[b]

*: Number of abroad was nominal (n=15) so it isn't calculated. **: Only one unemployed person has been identified in this region . A: Mediterranean, DAB: Eastern Anatolian, E: Aegean, GDA: Southeast Anatolian, İA: Central Anatolian, K: Black Sea, M: Marmara. 1 = Ministry of Food, Agriculture, and Livestock, 2 = Clinician, 3 = Academic staff, 4 = Municipal veterinarian, 5 = Other public sector (Ministry of National Education, Ministry of National Defense, Ministry of Health, Turkish National Police-Ministry of Interior), 6 = Other private sector (Drug-medical industry, Poultry industry, Meat and dairy industry, Veterinary consulting services, Jockey Club of Turkey, Company owner). a: p<0.001 is significant; b: p<0.05 is significant

groups (1990-1996, 1997-2003, and 2004-2011) and evaluated according to field of employment and gender distribution. Data of various periods have been provided in the tables below (Table 5 and 6).

Minimum, maximum, and mean values of age of admission to the faculty, age of graduation, and period of study of graduates have been provided in Table 7.

Frequency and mean frequency values of the field of employment according to regions, and difference significance details have been provided in Table 8 and frequency and significance of field of employment according to graduation periods in Table 9 (n=1.142).

Discussion

This study although covered graduates of Kafkas University Faculty of Veterinary Medicine, could said that, the results can be generalized in Turkey because of these graduates are comprised of students from seven regions of Turkey and of these graduates are working in the different seven regions also. The KAÜ Faculty of Veterinary Medicine seeks solutions for human and animal health problems in light of scientific and social studies, contributes to the awareness-raising of locals with scientific and social activities in the province of Kars, which is an important animal husbandry centre, and contributes to cultural life in and around Kars (Kızıltepe 2006). Likewise, it can be acknowledged that it contributes to human and animal health in Turkey with the veterinaries graduating from the faculty providing service all over Turkey (Table 7, 8 and 9).

Çiftçi (2011) pointed out that there were serious losses in the social benefits students of faculties of veterinary medicine obtained from teaching staff. Özen et al (2012a) reported that the high number of faculties and student quotas were among the problems experienced in veterinary medicine education. In the same manner, it can be suggested that the increase in the number of quotas (Table 1) can cause the rate

Table 9. Frequency (%) and significance table of field of employment according to graduation periods.

Working areas*	Groups of graduates			P
	1990-1996 (I) (%)	1997-2001 (II) (%)	2002-2011 (III) (%)	Value
MFAL (1)	42.10	49.50	54.10	0.007[b]
Clinic (2)	18.90	26.50	29.70	0.006[b]
University (3)	9.40	8.70	2.90	0.000[a]
Municipal (4)	8.20	4.00	3.60	0.016[b]
Other public (5)	3.80	0.90	1.00	0.007[b]
Other private (6)	14.70	8.60	8.10	0.230

*: Number of abroad was nominal (n=15) so it isn't calculated. 1= Ministry of Food, Agriculture, and Livestock, 2 = Clinician, 3 = Academic staff, 4 = Municipal veterinarian, 5 = Other public sector (Ministry of National Education, Ministry of National Defence, Ministry of Health, Turkish National Police-Ministry of Interior), 6 = Other private sector (Drug-medical industry, Poultry industry, Meat and dairy industry, Veterinary consulting services, Jockey Club of Turkey, Company owner). a: p<0.001 is significant; b: p<0.05 is significant.

of benefit provided by teaching staff to students to decrease in faculties with inadequate physical infrastructure.

The rate of female veterinaries graduating was determined to be 8.2% (n=19) between the years of 1990-1996, 19.3% (n=62) between the years of 1997-2003, and 6.9% (n=42) between the years of 2004-2011 (p=0.000). In a conducted study (Başağaç Gül et al 2008), it was reported that the rate of females graduating from faculties in small cities was 19.3% between the years of 2000-2005. It can be said that there was an irregular change in the rate of female veterinaries graduating from the KAÜ Faculty of Veterinary Medicine (Table 2 and 6), however, the rate of graduating females in the 1997-2003 period demonstrated parallelism with the study of Başağaç Gül et al (2008). It can be said that the low rate of female veterinaries is due to the difficult living conditions of the province of Kars and the difficulties of veterinary field services, especially oriented at sheep and goats and cattle and the rate of female veterinaries can increase with the increase in employment of veterinaries by the Ministry of Food, Agriculture, and Livestock due to Turkey's recent demand for European Union membership.

The fact that the mean rate of those graduating from KAÜ Faculty of Veterinary Medicine and serving in the region they were born is 54.37% and the dominant field of employment in the region is the "Ministry of Food, Agriculture, and Livestock" and "clinic enterprises", can be interpreted as veterinaries preferring their hometowns for both public and private service (MFAL provincial and district directorates) in addition to the region having a significant amount of livestock. Likewise, it can be said that the place of birth has an impact on veterinaries born in the Eastern Anatolian Region and working in this region as an academician (Table 3).

Engagement of sheep and goat and cattle husbandry at a significant level in the Eastern Anatolian Region, which has the lowest population among the seven regions in Turkey (8.43%) (Table 4) (TÜİK 2013) supports the higher rate of employment of veterinaries in the public (MFAL District and Provincial Directorates) and private (25.04%) sectors in this region compared to other regions.

It was determined that the rate of veterinaries working in the Ministry of Food, Agriculture, and Livestock was 50.78% (n=588). This finding conforms to the finding of Özen et al (2012c) that suggests that transfer from the private sector to the public sector is at an important level and the public sector is more preferable compared to other sectors.

The majority of veterinaries graduating from the KAÜ Faculty of Veterinary Medicine serving at MFAL Provincial-District Directorates (50.78%, n=588) and in clinical service for farm animals (26.94%, n=312) (Table 5) can be suggested to be the result of education (dominantly in practice) associated to the animal composition of the region.

In the study conducted in the United States, Chieffo et al (2008) determined that 10.70% of students graduating in 1989 provided large animal health services, this rate was 2.2% in 2007 and thus, there was a negative trend towards this field. When data in Table 5 in the study are examined, it was determined that there was a positive trend in rates of veterinaries providing clinic services, which is different to Chieffo et al (2008).

Factors such as regional demographic and socioeconomic structure, level of income, and market share are considered to be important for the clinical service field of veterinary medicine (Aral et al 2010). In the report titled "Structuring Oriented at Types at Clinics of Faculties of Veterinary Medicine" (Anonym 2011), the insufficiencies in the number of small animals (pet animals) in the Eastern Anatolian and Southeastern Anatolian Regions are observed to be a weakness for type based education. When the rate of students born in the Eastern Anatolian Region (24.96%, n=291), rate of those preferring to work in the region they were born (54.37%, n=634) and the dominant field of employment (MFAL and Clinic) among students graduating from the KAÜ Faculty of Veterinary Medicine are evaluated, the need for type based structuring can be emphasized in light of literature information and study findings.

It is emphasized that due to the high number of faculties and admission quotas, the quality of education decreased and associated employment problems started to arise (Anonym 2007, Özen et al 2007) and the increase in the number of graduates limited employment opportunities in the public sector (Aral et al 2010). It is reported that even though veterinaries experienced high-level dissatisfaction (Özen and Ateş 2003a) and students of faculties of veterinary medicine and veterinaries have concerns for their futures, they are hopeful (Özen et al 2012b) and in another study (Babaoğlu et al 2012) it is reported that veterinaries have a low burnout level. The current absence of an unemployment problem (Table 3 and 5) in our study, caused veterinaries to be hopeful, though concerned, (Özen et al 2012b) however, in the literature (Anonym 2007) as is known, it is suggested that the number of faculties without planning and infrastructure and the increase in admission quota, will cause employment problems in a few years.

It can be recommended that a study is conducted at a dissertation level for the purpose of mapping the employment of graduates of faculties of veterinary medicine in Turkey and thus, more rational suggestions can be made with regards to veterinary medicine employment policies. Furthermore, it can be said that efforts for drawing-up student and graduate profiles in the field of veterinary medicine can provide significant contributions to determining the needs and com-

petencies of veterinary medicine education oriented at both the public and private sectors.

Conclusions

In conclusion, the determination of status of veterinaries working in the region they were born and their dominant areas of employment can be evaluated as the strengths of the study, and it can be suggested that important contributions can be made to veterinary medicine, for which there are attempts for it to achieve high standards, through profile studies to be conducted at other faculties.

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References

Anonym, 2007. Serbest Veteriner Hekimlik ve Veteriner Sağlık Ürünleri Sempozyumu, 17-18 Mart 2007, Konya, Başkent Matbaası, p: 216.

Anonym, 2010. 3. Türk Veteriner Hekimliği Kurultayı Komisyon Raporları. Türk Veteriner Hekimleri Birliği, Ankara, p:23.

Anonym, 2011. Veteriner fakülteleri kliniklerinde türe yönelik yapılanma. http://www.yok.gov.tr/content/blogsection/40/274/., Erişim Tarihi: 21.11.2011.

Anonym, 2013. Gıda Tarım ve Hayvancılık Bakanlığı İl Müdürlükleri (81) internet erişimi.

Aral Y, Cevger Y, Demir P, Aydın E, 2010. Ankara ili evcil hayvan veteriner kliniklerinin yönetimsel ve ekonomik açıdan değerlendirmesi. Kafkas Üniv Vet Fak Derg, 16, 503-508.

Babaoğlu ÜT, Cevizci S, Arslan M, 2012. İstanbul'da çalışan veteriner hekimlerin iş doyumu ve tükenmişlik düzeyleri. Kafkas Üniv Vet Fak Derg, 18, 599-604.

Başağaç Gül RT, Özkul T, Akçay A, Özen A, 2008. Historical profile of gender in Turkish veterinary medicine. JVME, 35, 305-309.

Chieffo C, Kelly AM, Ferguson J, 2008. Trends in gender, employment, salary, and debt of graduates of US veterinary medical schools and colleges. J Am Vet Med Assoc, 233, 910-917.

Çiftçi M, 2011. Türkiye'de veteriner fakültelerindeki öğrencilerin öğretim üyelerinden sağladıkları sosyal fayda düzeylerinin Atkinson Eşitsizlik Endeksi yaklaşımıyla ölçümü. İstanbul Üniv Vet Fak Derg, 37, 89-96.

Erk N, 1978. Veteriner Tarihi, Ankara Üniversitesi Basımevi, Ankara, p:242.

Ilgen DR, Lloyd JW, Morgeson FP, Johnson MD, Meyer CJ and Marrinan M, 2003. Personal characteristics, knowledge of the veterinary profession, and influences on career choice among students in the veterinary school applicant pool. JAVMA, 223, 1587-1594.

Kızıltepe A, 2006. Kuruluşundan Bugüne Kafkas Üniversitesi Veteriner Fakültesi, I. Ulusal Veteriner Hekimliği Tarihi ve Mesleki Etik Sempozyumu Bildirileri (Ed:Abdullah Özen), 30 Mart-1 Nisan 2006, Elazığ, pp: 593-601.

ÖSYM – Öğrenci Seçme ve Yerleştirme Merkezi, 2013a. 2012 ÖSYS Yükseköğretim Programları ve Kontenjanları Kılavuzu, Erişim Tarihi: 20.10.2013, Erişim: http://dokuman.osym.gov.tr/pdfdokuman/2012/OSYS/2012OSYSKONTKILAVUZ.pdf

ÖSYM – Öğrenci Seçme ve Yerleştirme Merkezi, 2013b. 2013 ÖSYS Yükseköğretim Programları ve Kontenjanları Kılavuzu, http://www.osym.gov.tr/belge/1-19181/2013-osys-yuksekogretim-programlari-ve kontenjanlari-ki-.html., Erişim Tarihi: 10.12.2013.

Özen A, Ateş BK, 2003a. Sosyo-kültürel değişkenler ışığında veteriner hekimliğin profili: I. Sınıf bilinci ve iş doyumu. Eurasian J Vet Sci, 19, 39-48.

Özen A, Ateş BK, 2003b. Sosyo-kültürel değişkenler ışığında veteriner hekimliğin profili: II. Mesleki Örgütlenme. Eurasian J Vet Sci, 19, 49-56.

Özen A, Yüksel E, Özen R, Atıl E, Yaşar A, Yerlikaya H, 2007. A study on life satisfaction of Turkish veterinary practitioners. FÜ Sağ Bil Derg, 21, 5-10.

Özen A, Doğan Ö, Başağaç Gül RT, Özkul T, Yüksel E, 2012a. Türkiye'de veteriner hekimliği üzerine araştırmalar: I. veteriner hekimliği eğitim öğretimi. Kafkas Üniv Vet Fak Derg, 18, 605-611.

Özen A, Doğan Ö, Başağaç Gül RT, Özkul T, Yüksel E, 2012b. Türkiye'de veteriner hekimliği üzerine araştırmalar: II. Veteriner hekim olma kararını etkileyen faktörler ve bunların gelecek algısı üzerine etkileri. Kafkas Üniv Vet Fak Derg, 18, 731-737.

Özen A, Doğan Ö, Başağaç Gül RT, Özkul T, Yüksel E, 2012c. Türkiye'de veteriner hekimliği üzerine araştırmalar: III. İş fırsatları ve sektörel yönelimlere ilişkin görüş ve beklentiler. Kafkas Üniv Vet Fak Derg, 18, 907-911.

TÜİK – Türkiye İstatistik Kurumu, 2013. Nüfus ve hayvan sayısı istatistikleri, www.tuik.gov.tr., Erişim Tarihi: 14.12.2013