

Impact of the COVID-19 Pandemic on Racehorse Breeders*

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ABSTRACT

In this study, a face-to-face survey study was conducted with 58 racehorse breeders and business owners located in Adana, Ankara, Mersin and Sanliurfa provinces about racehoring during the pandemic period. The study data were analyzed and evaluated with the SPSS 22.0 program. According to the results, according to the gender, horse breeding is largely carried out by men, participants have the most high school graduates as an education level, the average age is 38.6, and they have experienced the most financial losses during the pandemic period, the reason for which is the inability to hold competitions. When these results of breeders are evaluated, it is suggested that it would be beneficial for them to be evaluated regionally in a sub-branch of the ministry and to provide informative trainings for horsemanship in cooperation with the university, the ministry and TJK.

COVID-19 Pandemisinin Yarış Atı Yetiştiricileri Üzerine Etkisi

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ÖZ

Bu çalışmada Adana, Ankara, Mersin ve Şanlıurfa ilinde bulunan 58 Yarış atı yetiştiricisi ve işletme sahibiyle pandemi döneminde yarış atılığı hakkında yüzyüze anket çalışması yapılmıştır. Çalışma verileri SPSS 22.0 programıyla değerlendirilmiştir. Sonuçlara göre, cinsiyet olarak at yetiştiriciliğinin büyük oranda erkekler tarafından yürütüldüğü görülmektedir. Çalışmada yeralan katılımcıların eğitim seviyesi olarak en fazla lise mezunu oldukları, yaş ortalamalarının 38.6 olduğu ve pandemi döneminde en fazla maddi kayıp yaşadıklarını tespit edilmiştir. Bu maddi kaybın sebebi olarak da müsabakaların yapılamaması olduğu belirtilmiştir. Yetiştiricilerin bu sonuçları değerlendirildiğinde bir bakanlık alt şubesinde bölgesel olarak değerlendirilmeleri ve atılığa yönelik bilgilendirici eğitimlerin üniversite, bakanlık ve TJK işbirliği ile verilmesinin faydalı olacağı görüşü sunulmaktadır.

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1. Introduction

It is known that, the first people who domesticated the horse were societies in Asia to facilitate their nomadic life. As a result of research conducted in recent years, it is observed that, the Botai Culture in Kazakhstan has started to use the horse in human service by domesticating it. In the Copper Age in the north of Kazakhstan (3700 - 3100 BC), it turned out that people of this culture lived in large settlements, fed the horse both as a passenger animal and for its meat and milk (Nesterov, 1990; Levine, 1999; Zaharov, 2010). The horse has become the most important part of the lives of these nomadic societies as a horse, carrying a load, pulling a load, hunting, an animal whose meat and milk are used. After the domestication of the horse, the domestication of the horse and the introduction of the equestrian shepherd culture are observed in the first Turks. When historical documents are examined, the necessary conditions for the great state foundation were only when horses were domesticated and entered human service (Koppers, 1941). The Turks easily traveled through the geographically difficult steppes on their horses, again crossed high mountains and gorges, and carried out raids and conquest movements thanks to their horses (Sümer, 1983). Since the earliest times, the horse has played an important role in the political, religious, economic and social life of the Turks. The Turks ate the meat of the horse they raised in herds, offered it as a sacrifice and provided their economy by exporting thousands of war horses to foreign countries every year (Kafesoglu, 1989).

From the very beginning, important developments have emerged regarding the horse, which holds the most important place in the life of Turks. The Turks have a long-established tradition of equestrian sports, using the horse in battle, using the horse's meat and milk. Horse sacrifice also has a very widespread and decadent tradition among the Turks. The horse has taken an important place in the social, military, economic and religious life of the Turks.

Different races are held in many countries around the world. For flat racing, jump racing, harness racing, walking and trot running in general, it is a flat run that takes place on an oval and flat track that is at the very bow of the racer. All flat running, which is watched with interest in Turkey as well as in the world, is one of the oldest and most broadcast sports. In addition, he is a veterinarian, trainer, trainer, prankster, stable boy and breeder with the characteristics of the flat running industry it is an important source of direction for professions such as (Ünlüoğlu, 2022). With the public also it provides resources to the whole (Can, 2015).

Today, the official races are 6132. it is carried out by the Jockey Club of Turkey (TJK) with the authority obtained from the contract renewed by the Ministry of Agriculture and Forestry for certain periods based on the Law on numbered Horse Races. Applications and regulations made by TJK as a result, racing revenues have increased and large investments have been made thanks to these revenues. Horse breeding boarding houses, decoupling stations and modern hippodromes established for these investments are among them. As of 2022, in Turkey the number of hippodromes has increased to 10.

With the introduction of new animals into our lives and the development of technology, the purpose of feeding and transportation of the horse was prevented from breeding, but it continued to be used mostly

for training before the war, weddings, holidays and sports activities for entertainment. Today, with breeding related to the size, speed and body structure of horses, horses are used on racetracks, equestrian sports, therapy and children's entertainment. The racing sector occupies a large place in these areas.

Epidemics that spread over a very wide area in more than one country or continent in the world and show their effect are called pandemics. December 31, 2019, the Covid-19 pandemic in Wuhan, Hubei province, China, was classified as an “international public health emergency” on January 30, 2020, and was defined as a global pandemic on March 11 due to the occurrence, spread and severity of this virus in 113 countries outside of China (T.C. Ministry Of Health, 2020). Due to the pandemic, breeders and business owners working in this sector have experienced financial and spiritual losses with the cancellation of races in racehorses, as in every sector. The aim of this study is to make suggestions on what can be done by detecting the problems experienced by this sector in the pandemic.

2. Materials and Methods

The primary data of this research were formed by information obtained by survey method from racehorse breeding enterprises operating in Adana, Ankara, Mersin and Sanliurfa provinces. The data belong to the year 2021 and were obtained by applying a survey to business owners who were interviewed face-to-face. In addition to the primary data, previous research findings related to the subject with other institutions and organizations have also formed the secondary data of this research.

December 95% confidence interval and 10% margin of error limits were used in the research. As a result of the calculations made by applying the following simple random sampling method formula, it was deemed appropriate to conduct a survey in 58 enterprises (Çiçek and Erkan, 1996).

$$n = \frac{N * s^2 * t^2}{(N - 1)d^2 + s^2 * t^2} \quad (1)$$

In the Formula;

n = Sample volume

s = Standard deviation

t = the t value at the 95% confidence limit (1.96)

N = The total number of enterprises belonging to the sampling frame

d = Represents the acceptable error (10% deviation)

The data obtained from the survey study were analyzed using the SPSS 22.0 package program.

3. Results and Discussion

As a result of the evaluations, it is observed that a high proportion of breeders are male as a gender. The reason for this is shown to be a heavier job. But in recent years, it is seen that there have been increasing increases in the proportion of women in the world and in Turkey. It was found that the participants were between 18 and 67 years of age Decently and the average breeders were 38 years old (Table 1).

Table 1. Descriptive statistics

Structural Characteristics	Lowest	Highest	Average	Standard Deviation
The age of the breeding	18	67	38.50	11.14
Number of family members	2	25	5.85	3.56
Duration of horse breeding	2	51	18.53	10.66

It was observed that the highest participation was achieved from Şanlıurfa province as a province. The average number of family members with dependents is 5.8, the average duration of horse breeding is 18.5 years, when looking at the insurance status, it was found that a lone breeder is uninsured, as a matter of educational status, the most high school, middle school and college graduates are breeders.

It has been determined that breeders participate in more than 15 races throughout the year, and as racehorses, they have a maximum of 1-3 racehorses, and these horses are mostly (41%) Arabian horses. It was seen as a result of the evaluation that they mostly did not sell their horses and did not hire workers during the pandemic period. It is seen that they spend the most financially on feed and workers, but they still have problems with these two issues.

It was determined that there were decreases in the performance of horses who experienced financial difficulties during the period when the races were stopped due to the pandemic. The proportion of those who said that 50-100 thousand TL was lost during the pandemic period was found to be high (Table 2).

Table 2. Participant profile and identified problems

		(N)	%
Province	Adana	13	23.2
	Ankara	3	5.4
	Şanlıurfa	35	62.5
	Mersin	5	8.9
Sex	Male	56	96.6
	Female	2	3.4
Your other profession	Yes	34	63.0
	No	20	37.0
Monthly income	0-715\$	10	28.6
	716-1430\$	8	22.9
	1431-2145\$	7	20.0
	2146-2860\$	1	2.9
	2861\$+	9	25.7
Insurance status	Yes	36	63.2
	No	21	36.8
Educational Status	No education	2	3.5
	Primary school	8	14.0
	Middle school	13	22.8
	High school	15	26.3
	2- year university	10	17.5
	4- year university	9	15.8
The number of races they participated in during the year	1-5	12	21.4
	6-10	13	23.2
	11-15	11	19.6
	16+	20	35.7
Number of horses owned	1-3	29	50.0
	4-5	11	19.0
	6-10	12	20.7
	11-19	5	8.6
	20+	1	1.7
Breeds of horses owned	Arabian	24	41.4
	Thoroughbred	18	31.0

The number of horses sold in the pandemic	mixed	16	27.6
	1-3	22	39.3
	4-5	7	12.5
	6-9	2	3.6
	10+	2	3.6
The number of employees in the enterprise	Any	23	41.1
	1-3	29	54.7
	4-5	9	17.0
	6-9	9	17.0
	Family members are working	5	9.4
Monthly cost of workers	10+	1	1.9
	143-429\$	7	12.5
	430-715\$	7	12.5
	716-1430\$	22	39.3
	1431-2860\$	11	19.6
The situation of financial support during the pandemic	2861\$+	9	16.1
	Yes	14	25.9
	No	40	74.1
The most common disease in horses during the pandemic	Epidemic disease	3	6.8
	Orthopedic disease	22	50.0
	Loss of fitness and diseases	16	36.4
	Epidemic disease - Loss of fitness and diseases	2	4.5
The biggest problem in horse breeding in the pandemic period	All	1	2.3
	Feed and ration	11	21.6
	Technical staff	12	23.5
	Trainer	1	2.0
	Veterinary service	6	11.8
	Animal insemination (artificial and natural)	2	3.9
	Transportation	3	5.9
Abnormal behavior observed in horses during the pandemic	All	16	31.4
	Unrest	9	34.6
	Combativeness	11	42.3
	Inactive	3	11.5
	Low resistance	2	7.7
	All	1	3.8

N: The number of participants who responded

It is observed that they earn an average of 10-20 thousand \$ as annual earnings, and 70% of the participants did not receive any support from an institution during the pandemic period. They reported that their biggest financial losses during this period were racing competitions. They also reported that they are doing this profession as a source of livelihood at a high rate and that they will continue to do so. 70% of them reported that they did not receive any horsemanship-related training and 63% of them did not receive any specialist support. When asked about their expectations it was determined that they wanted the most technical staff and informative trainings.

When we ask what is the biggest problem in horse breeding most of them report that they have problems related to feeding and technical staff although they say a few problems together. When we asked about the diseases they saw in their horses during the pandemic period most of the participants reported that although there was no racing during this period orthopedic diseases were experienced in relation to performance.

According to the evaluations it is observed that horse breeders are mostly composed of high school graduates who are under the patronage of men as a gender and have an average age of 38. Although

similar results have been achieved in many studies (Martinson and Bartholomay 2009; Hartmann et al. 2017). found different results in terms of sex ratio (Martinson and Bartholomay 2009). Most of the information that they are raising in the profession of coming from the father and that they will continue has been confirmed from them.

There are differences in their economic levels and the number of horses is mostly seen in the range of 0-5. Similar results Tennah et al. (2014) it is seen in the study conducted in Algeria. In contrast to our study different results were obtained in the study conducted in New Zealand (Lillywhite and Wise 2009). It has been determined that they suffered losses especially performance due to their inability to participate in races during the pandemic period.

When the results are examined it is seen that universities where there is a very low level of education related to horse breeding do not have interviews with relevant departments and do not receive support or even do not even know that there is a department related to this topic in the city where they live.

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Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Authors' Contributions

The authors contributed equally to this study.

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