

Health Service Utilization in Rural Areas of Edirne and Kırklareli

Edirne ve Kırklareli Kırsalında Sağlık Hizmeti Kullanımı

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ABSTRACT

Aim: This study aims to assess health service utilization and its correlation with socio-economic variables among rural residents of Edirne and Kırklareli provinces.

Materials and Methods: This cross-sectional study was conducted between May and October 2019 with a survey in 414 households in 50 villages in Edirne and Kırklareli provinces. Data were collected via a 42-question questionnaire.

Results: Of the visited villages, 36 (72%) lacked health institutions, while 5 (10%) had health centers and 9 (18%) had family health centers (FHC). During working hours, 50.2% preferred public hospitals, 37.2% favored FHC, and 9.2% chose private hospitals/practices. Notably, 64.5% of elderly participants with chronic conditions lacked regular follow-ups, along with 65.5% of women aged 15-49 years, while all children received regular care.

Conclusion: Although access to healthcare services appears to be sufficient in the rural areas of Edirne and Kırklareli, located in the Thrace region, it has been observed that there is a dependency on demand-based services. Notably, consistent primary care follow-ups, excluding childhood, appear lacking, highlighting a gap in providing qualified and reliable health services to the public.

Keywords: Thrace, rural area, health service

ÖΖ

Amaç: Bu çalışma, Edirne ve Kırklareli illerinde kırsal kesimde yaşayanların sağlık hizmetlerinden yararlanma durumlarını ve bunun sosyo-ekonomik değişkenlerle ilişkisini değerlendirmeyi amaçlamaktadır.

Gereç ve Yöntem: Mayıs ile Ekim 2019 tarihleri arasında yapılan bu kesitsel çalışma, Edirne ve Kırklareli illerine bağlı 50 köyde 414 hanede anket uygulamasıyla gerçekleştirilmiştir. Veriler, 42 sorudan oluşan bir anket ile toplanmıştır.

Bulgular: Ziyaret edilen köylerin 36'sında (%72) sağlık kurumu bulunmazken, 5'inde (%10) sağlık merkezi ve 9'unda (%18) aile sağlığı merkezi (ASM) bulunmaktadır. Çalışma saatleri içinde katılımcıların %50,2'si kamu hastanelerini tercih ederken, %37,2'si ASM'leri ve %9,2'si özel hastane ya da muayenehaneleri tercih etmiştir. Kronik hastalığı olan yaşlı katılımcıların %64,5'inin ve 15-49 yaş arası kadınların %65,5'inin düzenli takiplerinin yapılmadığı, ancak tüm çocukların düzenli bakım aldığı dikkat çekmiştir.

Sonuç: Trakya bölgesinde bulunan Edirne ve Kırklareli illeri kırsalında sağlık hizmetlerine erişim yeterli görünse de başvuru esaslı hizmetlere bağımlılık olduğu gözlenmiştir. Çocukluk dönemi haricinde düzenli birinci basamak sağlık hizmeti takiplerinin eksikliği, nitelikli ve güvenilir sağlık hizmetlerinin sunumunda bir boşluk olduğunu göstermektedir.

Anahtar Kelimeler: Trakya, kırsal, sağlık hizmeti

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INTRODUCTION

Although globally rural areas are typically characterized as regions distant from urban centers, with low population density, predominantly elderly populations, and economies primarily reliant on agricultural activities, each country's definition of rural areas varies based on its own geographical structure, population density, economic, and social characteristics¹. In Turkey, until March 2014, the Turkish Statistical Institute (TUIK) classified settlements with populations of 20,001 or more as urban and those with populations of 20,000 or fewer as rural, following the criteria established by the State Planning Organization in 1982 in its "Urban Threshold Survey: Urban Definition for Turkey." However, with the enactment of Law no. 6360 published in the Official Gazette in 2014, which granted metropolitan municipality status to 30 provinces, villages within the boundaries of these provinces were designated as neighborhoods, altering the rural-urban classification significantly within these metropolitan areas based on the 20,000 population threshold².

Numerous opportunities that enhance quality of life are less prevalent in rural areas compared to urban areas. Particularly in terms of education, healthcare services, employment opportunities, and technological infrastructure, cities hold significant advantages. Consequently, the younger population tends to prefer urban areas for residence, leading to an increase in the elderly population in rural areas.

According to the Address-Based Population Registration System 2023 data from the TUIK, 7% of Turkey's population resides in rural areas (towns and villages). The percentage of the population aged 65 years and over is 9.9% in urban areas and 30.1% in rural areas³. However, according to World Bank data published by the Ministry of Environment, Urbanization, and Climate Change, 23% of Turkey's population lives in rural areas⁴.

We define healthcare services as planned activities aimed at preserving individual and community health, providing treatment when individuals are ill, enabling independent living in the event of disability, and improving public health5. In Turkey, preventive, curative, rehabilitative, and promotive healthcare services are provided by public and private healthcare institutions at the primary, secondary, and tertiary levels. Despite the tiered structure of healthcare service delivery, there is no mandatory referral system between tiers, and individuals can receive services from the institution of their choice. The choice of healthcare institution by individuals is influenced by various factors such as their economic status, the presence of social security coverage, proximity to healthcare facilities in their place of residence, educational background, previous experiences with healthcare institutions, technological infrastructure of healthcare institutions, as well as the socio-cultural structure of the community, and individual knowledge, attitudes, and beliefs^{6,7}.

In our country, primary health care services were provided through the "health centers" of socialization model until 2005. In the socialization model, primary services (preventive services for society and the environment) were provided through district-based health centers. In this model, health care services in rural areas were provided through the village type health centers and health posts that were staffed by midwives. The "family medicine" practice, which started as a pilot program in Düzce province in 2005, was expanded to cover the entire country in 2010. In family medicine model, healthcare services in rural areas are primarily provided through periodic visits by family physicians (FPs) to rural areas and in few villages that far from city centers by midwives and nurses stationed at health posts, who are affiliated with FPs located in the nearest urban areas⁸.

Another unit that provides primary health care services is the community health centers (CHC) in this model. Unlike family health centers (FHC), which focus on individual-oriented activities, CHCs provide services aimed at the community. They aim to improve and protect the health of the community in their region. By conducting risk analyses related to community health, they identify existing problems and develop plans to address these issues⁹. They monitor, supervise, and coordinate family medicine units. Additionally, CHC are responsible for providing various primary health care services such as environmental health services, monitoring and intervention services for infectious and chronic diseases, forensic medicine services, health education services, and the licensing of private health institutions¹⁰.

As a result of the change in the organizational chart of the Ministry of Health, following Decree Law no. 694 dated 15.08.2017, the responsibilities of CHCs are carried out by District Health Directorates in their respective districts, depending on the population and size of the region. However, there are still places where CHCs continue their activities⁸.

The aim of this study is to determine the utilization of healthcare services by residents of rural areas in two provinces (Edirne and Kırklareli) in the Thrace region and to examine the relationship between individuals' healthcare service utilization and certain socio-economic variables.

MATERIALS AND METHODS

The study is cross-sectional research conducted in the rural areas of Edirne and Kırklareli provinces in the Thrace region between May and October 2019. Due to the lack of information regarding traditional urban and rural definitions in Law no. 6360, which connected the villages to the center and given neighborhood status. Because of the ongoing unresolved issues in the urban/rural distinction since 2014, in this study, the status of settlements prior to Law no. 6360 was used, similar to the Turkey Demographic and Health Survey 2018¹¹.

The sample size was calculated as minimum 384 households, using tables prepared by the World Health Organization for "estimating a population proportion with a certain relative precision¹²." Approximately 10% of the 432 villages in the rural areas of Edirne and Kırklareli (50 villages; 29 villages from Edirne, 21 villages from Kırklareli, with different distances to district centers) were determined by simple random sampling method and 414 households were determined by weighting them according to the population of the villages. The households in the villages were selected using systematic sampling, with the mukhtar's house as the starting point, and data were collected through face-to-face interviews with one consenting individual per household. If there were infants or children in the household, interviews were conducted with their parents; if there were women aged 15-49 years, interviews were conducted with themselves; and if there were individuals aged 65 years or older, interviews were conducted with them separately. Individuals who agreed to participate in the study were informed about the research and verbal consent was obtained. In cases where no one was found at the selected household or if the household members refused to participate, interviews were conducted with one person from the neighboring household.

For data collection, a 42-item questionnaire was developed by researchers, based on relevant literature, to ascertain information regarding various socio-demographic characteristics, household income, social security status of household members, their health conditions, and healthcare utilization patterns (such as the healthcare facility visited within the last year, preferred healthcare facility in case of health issues, etc.). Additionally, healthcare utilization (including screenings and cancer screenings, etc.) for infants and children, women aged 15-49 years, and individuals aged 65 years and above were separately investigated if present in the household.

The distances of villages to the nearest state hospital (SH) were calculated using the Google Maps application for road transportation.

Ethical approval for the research was obtained from the Trakya University Scientific Research Ethics Committee (decision no: TÜTF-BAEK 2019/198, date: 13.05.2019).

Statistical Analysis

Data analysis was performed using IBM SPSS Ver 25.0 software, employing descriptive statistics along with the chi-square and Student's t-test. The normal distribution of continuous variables was assessed using the Kolmogorov-Smirnov test. Statistical significance level was accepted as p<0.05.

RESULTS

Within the scope of the study, a total of 414 households were reached, including 26 (52%) from Kırklareli and 24 (48%) from Edirne, representing 50 villages in total. At least one individual from each household was interviewed. Descriptive characteristics of the interviewees are summarized in Table 1.

The average number of individuals residing in the households was 3.2 ± 1.6 (median: 3; min: 1; max: 14) people. Descriptive characteristics of the interviewed households are presented in Table 2.

In 36 of the visited villages (72%), there is no healthcare facility, while 5 villages (10%) have a health clinic and 9 villages (18%) have a primary healthcare center (PHC). It is noted that in villages without any healthcare facility and those with health clinics, mobile services are provided by their FP The average distance to the nearest SH from the villages is 16.5±8.5 km (min: 5.7-max: 60.3).

Table 1. Descriptive characteristics of the interviewees					
Descriptive characteristics	No	0⁄0			
Gender					
Female	192	46.4			
Male	222	53.6			
Age groups (year)					
18-25	31	7.7			
26-35	39	9.9			
36-45	61	15.9			
46-55	79	20			
56-65	99	26.6			
65 and above	105	19.8			
Marital status					
Married	328	79.2			
Single	72	17.4			
Widowed	11	2.7			
Divorced	3	0.7			
Education status					
Illiterate	8	1.9			
Literate	4	1.0			
Primary school graduate	4	63.5			
Secondary school graduate	45	10.9			
High school and above graduate	94	22.7			
Source of income					
Officer	15	3.6			
Worker	37	8.9			
Farmer	109	26.3			
Retired	117	28.3			
Unemployed	95	22.9			
Other	41	9.9			
Total	414	100			

The median number of healthcare service utilization in the past year among participants is 4.5 (mean: 5.4 ± 4.7 , min: 0-max: 19), and the median number of emergency department visits is 0 (mean: 1.0 ± 1.7 , min: 0-max: 10).

Table 2. Descriptive characteristics of households				
Descriptive characteristics	n (%)			
Number of individuals living in the household				
1 person	30 (7.2)			
2-4 people	298 (72.0)			
5 or more people	86 (20.8)			
Number of income earners in the household				
1 person	251 (60.6)			
2 people	131 (31.6)			
3 or more people	32 (7.7)			
Monthly income of the household*				
2020 TL and below	205 (49.5)			
Above 2020 TL	209 (50.5)			
Social security status of the household				
No social security	17 (4.1)			
Presence of SGK premium debt in the household				
Having premium debt (Bağ-Kur insured)	40 (9.7)			
*The minimum wage for the year 2019, when the study was conducted, is 2020 TL SGK: Social security institution				

The healthcare facilities where participants received services in the past year during office hours and their preferred healthcare facilities when facing a health problem are summarized in Table 3.

When participants were asked about the reasons for their choice of the initial place of application, 181 individuals (43.7%) indicated "proximity," 90 individuals (21.7%) stated "reliability," and 78 individuals (18.8%) mentioned "good technical facilities" as their reasons. Additionally, 32 individuals (7.7%) mentioned "affordability," and 21 individuals (5.1%) reported choosing based on knowing someone at the facility. The majority of those who preferred the PHCs (80.5%) stated that they chose it due to its proximity, while 30.7% of those who preferred a SH or university hospital mentioned better technical facilities, and 24.8% cited higher reliability as reasons. Among those who chose a SH, 13.9% mentioned affordability as the reason for their preference over other hospitals.

When examining the factors affecting the first choice of healthcare institution during working hours, it was determined that there was no significant difference based on the distance of the residence to the nearest SH, whether the household had any Social Security Institution (SSI) premium debt, or whether

Table 3. The healthcare facilities used in the past year and their primary choices for addressing health issues					
Healthcare facilities	Receipt of healthcare services within the last year*	Their first-choice healthcare institution for health issues			
	n (%)	n (%)			
Primary healthcare center	230 (55.6)	154 (37.2)			
Mobile health service	52 (12.6)	0 (0)			
State hospital	286 (69.1)	208 (50.2)			
University hospital	54 (13.0)	13 (3.1)			
Private hospital	81 (19.6)	28 (6.8)			
Private clinic	10 (2.4)	10 (2.4)			
Emergency service	169 (40.8)	1 (0.2)			
*Since participants provided multiple responses, th	ne total may exceed 100				

Table 4. Factors influencing the choice of primary healthcare institution during office hours

		Preferers of primary care institutions n (%)	Preferers of non-primary care institutions n (%)	p value
Having outstanding premium debt despite having social security coverage	Yes	15 (37.5)	25 (62.5)	0.967*
	No	139 (37.2)	235 (62.8)	
Having a monthly household income below the minimum wage	Yes	65 (31.7)	140 (68.3)	- 0.022*
	No	89 (42.6)	120 (57.4)	
The presence of a primary health care center in their village	Yes	96 (41.4)	136 (58.6)	0.047*
	No	58 (31.9)	124 (68.1)	
The presence of children under 5 years of age in the household	Yes	16 (45.7)	19 (54.3)	0.276*
	No	138 (36.4)	241 (63.6)	
The presence of individuals over 65 years of age in the household	Yes	41 (39.0)	66 (61.0)	0.650*
	No	113 (36.6)	194 (63.4)	
Distance to the nearest state hospital		18.3±10.9 km	16.4 <u>+</u> 6.4 km	0.070**
Statistical significance level was accepted as p<0.05. *chi-	square test, **Stu	dent's t-test	·	

there were individuals over 65 years old or children under 5 years old in the household. However, differences were observed based on the household income and the presence of a FHC in the village of residence (Table 4). It was determined that households with income below the minimum wage tended to prefer non-primary care institutions more, while those living in areas where a PHC was available tended to prefer primary care institutions.

In the scope of the research, 105 individuals aged 65 years and over were interviewed, and out of these, 79 individuals (73.8%) reported having at least one diagnosed chronic disease. Among the 79 individuals with diagnosed chronic diseases, 51 (64.5%) stated that their FP did not conduct regular check-ups for their chronic conditions. Additionally, 94 individuals (87.8%) aged 65 years and over mentioned that their FP did not recommend any vaccine, while 13 individuals (12.1%) reported being recommended for vaccination. Out of the 13 individuals who were recommended for vaccination by their FP, 9 (69.3%) stated that they received the recommended vaccine(s), while 4 (30.7%) did not.

Within the households surveyed, 93 included female participants aged 15-49 years, and they were individually interviewed. Among these female participants, 61 (65.5%) reported that they did not receive regular check-ups by their FPs. Among the 19 women who had experienced pregnancy in the last 5 years, they preferred the following facilities for antenatal care: 84.2% preferred primary health centers, 73.6% preferred SH, and 31.5% preferred university hospitals (participants provided multiple responses). It was found that those who experienced pregnancy underwent antenatal care an average of 6 ± 0.4 times at primary health centers, 6 ± 1 times at SH, and 8±0.7 times at private hospitals (PHs). Out of the 19 women who experienced pregnancy, 11 (57.8%) had timely deliveries, 6 (31.5%) experienced preterm births, and 2 (10.5%) experienced induced abortions. One induced abortion was performed at a SH, and the other was performed at a PH. Among live births, 70.5% occurred at PHs, 23.5% at SH, and 5.8% at university hospitals.

In 35 households (8.5%), children under the age of 5 years were present. Among these households, 27 (77.1%) had one child under the age of 5 years, and 8 had two children. All children received infant and childhood check-ups by FPs. Besides the FP, children were taken for check-ups to SH (31.4%) and PHs (22.8%). All households with children under the age of 5 years (100%) reported that their children received all the vaccines recommended by the FP.

When asked, "Have you ever had cancer screening done?", 130 individuals (31.4%) reported having undergone screening. Out of 161 women aged 30 years and over, 72 (44.7%) had cervical cancer screening. Out of 141 women aged 40 years and over, 71 (50.4%) had mammography for breast cancer screening, and out of 243 individuals aged 50 years and over, 65 (26.7%) had colon cancer screening.

DISCUSSION

This study is a cross-sectional study that aimed at evaluating the utilization of health services and factors influencing health service usage among the rural population of Edirne and Kırklareli. A total of 414 households were surveyed. The average household size in our study (3.2 individuals) is similar to the average household size in Turkey in 2019 (3.35 individuals)¹³.

Individuals residing in rural areas utilize health services less compared to those in urban areas¹⁴. One of the fundamental determinants of health service utilization is the distance traveled to obtain healthcare services, a fact well-established for a long time. A study conducted in Nigeria found that the utilization of health services decreased exponentially with increasing distance to healthcare facilities¹⁵. In our study, among the villages included, 36 (72%) had no healthcare facilities, 5 (10%) had health centers, and 9 (18%) had PHC . The average distance to the nearest SH from the villages was 16.5±8.5 km. A study conducted in Bursa reported similar findings, with rural neighborhoods being an average of 14.6 km away from primary health care centers and 16.57 km away from SH, comparable to our study¹⁴.

Another significant factor affecting access to healthcare services is socio-economic status¹⁶. Among the 414 households surveyed, 49.5% had monthly incomes below the minimum wage, and 4.1% had no social security coverage, while 9.7% of households were insured under the Bağ-Kur system with premium debts. In 2019, general health insurance premiums of 9.1% of Turkish population were paid by governance and general health insurance premiums of 2.9% were paid by themselves¹⁷. According to Turkey Demographic and Health Survey 2018, 15% of women aged 15-49 years were in rural areas outside the scope of social security¹¹. It is seen that the social security coverage in the villages where our study was conducted is better than in Turkey. A study conducted in Gebze in 2004 found the absence of social security coverage to be as high as 24.6%, while a study by Çakır¹⁴ in Bursa reported that 46.8% of rural households had monthly incomes below the minimum wage, and the absence of social security coverage was approximately twice as high (8.2%) as in our study. These results suggest that social security coverage has expanded in our country over time⁶.

Within the past year, excluding emergency situations, 69.1% of participants stated that they received services from SH, 55.6% from FHC, 19.6% from PH, and 12.6% from mobile health service when experiencing a health problem. Furthermore, when asked where they would prefer to receive services if they had a health issue, 50.2% indicated SH and 37.2% FHC. Despite living in rural areas and being an average of 16 km away, second-level healthcare facilities are the most utilized and preferred units for receiving healthcare services. Similarly, a study conducted in Eastern Anatolia in 2008 (67%) and in Bursa (44.5%) found that SH was the preferred initial point

of contact for healthcare services^{14,18}. In a study conducted in Southern Ethiopia in 2019, participants preferred public primary healthcare institutions first, followed by educational and referral hospitals when they had a health problem¹⁹. In contrast to our findings, similar studies conducted in Turkey before and after the Health Transformation Program indicate that FHC were the primary choice for healthcare services²⁰⁻²². These studies were mainly conducted in urban areas, and the primary reason for choosing FHC was their proximity. Similarly, in our study, the main reason for choosing FHC was its proximity. People living in rural areas generally travel to the nearest district centers to receive healthcare services and prefer SH due to the ability to directly access the desired level of care without a mandatory referral system between levels.

In our study, factors influencing the choice of the primary healthcare facility during working hours were examined. It was determined that whether the household had SSI premium debt, the presence of individuals aged 65 years and over or children under the age of 5 years did not affect the preference for first or second-level healthcare facilities. However, household income and the presence of FHC in the village of residence were found to influence this preference. Similarly, a study conducted in rural areas of Eskişehir found that those benefiting from mobile health services had significantly higher rates of referrals to second-level healthcare facilities7. The Ministry of Health transitioned to family medicine practice due to the inadequacy of the health center system established under Law no. 224 in meeting the healthcare needs of the population and the tendency of a large group of patients who could be treated at the primary care level to seek care from second and third-level healthcare facilities²³. However, in our study and similar studies, it was observed that SH were the primary choice for healthcare services in rural areas, individuals receiving mobile health services preferred SH over FHC, and even those with poor socio-economic status preferred second-level healthcare facilities for receiving healthcare services. This suggests that family medicine practice may be inadequate in rural areas^{7,14,18}. Similarly, in another study conducted in rural Indonesia, it was found that individuals with the poorest socio-economic status constituted the group that benefited the least from primary healthcare services¹⁶.

In this study, 73.8% of the interviewed individuals over the age of 65 years had at least one diagnosed chronic illness. In Çakmur²⁴ study conducted in Kars province, this rate was 19% among individuals over 65 years old. In our study, 64.5% of individuals with a chronic illness stated that their FP did not conduct regular check-ups related to their chronic condition. This may suggest that the lack of chronic disease management by FPs and individuals' preference for being examined by specialists, indicating the influence of the perception of excessive specialization, contribute to the preference for SH as the first choice for healthcare services. Additionally, the fact that 87.8% of individuals aged 65 years and over reported that their FPs did not recommend any vaccines indicates that

preventive services for the elderly are not effectively provided in the rural areas of these two provinces.

In this study, it was determined that the follow-up of women aged 15-49 years was not effectively conducted, although prenatal and child healthcare services were relatively better in terms of quantity in the rural areas of Edirne and Kırklareli. In our study, the rate of receiving prenatal care among pregnant women was found to be higher compared to Çakır¹⁴ study conducted in Bursa and the Turkey Demographic and Health Survey 2018 data¹¹. Despite the availability of follow-up services in SH and PHs, the effective provision of prenatal and child healthcare services may be influenced by the inclusion of these services in the performance criteria of FPs. In our study, 70% of the births in the last five years occurred in PHs, all of which took place in a healthcare facility.

Screenings conducted at the primary healthcare level are crucial for the early diagnosis of cancers. In our study, 31.4% of the participants had undergone at least one screening for breast, cervical, or colorectal cancer. This rate is similar to the cancer screening rates reported in Turkey and in the study conducted in Bursa^{14,25}. However, it is lower compared to the screening rates in the European Union²⁶.

Study Limitations

The data obtained from this study only represent the provinces of Edirne and Kırklareli and cannot be generalized to the Thrace Region or Turkey. Other limitations include the fact that data on children were obtained from parents, which may introduce memory bias, and reliance on participants' selfreported healthcare usage.

CONCLUSION

Environmental and climatic conditions, socioeconomic factors, the quality and quantity of healthcare services provided, ethnic composition, cultural factors, and societal characteristics all influence health outcomes. While the environmental, climatic, and transportation conditions in Edirne and Kırklareli provinces do not pose significant barriers to accessing healthcare services, deficiencies in the delivery of primary healthcare services and the quality of care provided often direct people to secondary healthcare facilities. In our study, nearly half of the participants residing in rural or semi-rural areas reported receiving primary healthcare services through mobile units. Most participants stated that they would seek care at secondary healthcare facilities when faced with a health issue and would continue to do so. The lack of community-based family medicine practices, the absence of on-site healthcare delivery in rural areas, and the lack of home visits have limited primary healthcare services to those who seek them, leading to existing policies that encourage individuals to seek care primarily at hospitals.

According to the inverse care Law, the availability of quality healthcare tends to vary inversely with the need for healthcare

services in the population served, with studies indicating that this Law operates more strongly in areas where medical care is left to market forces and less so in areas dominated by public provision²⁷. Hence, social policies play a crucial role as one of the most significant factors affecting health. It is imperative to provide healthcare services within the framework of equitable social policies. Rather than expecting the rural population to access healthcare services, a rights-based approach to health should involve bringing quality and reliable healthcare services to them, ensuring long-term access to healthcare, and reducing health inequalities between rural and urban areas.

Ethics Committee Approval: Ethical approval for the research was obtained from the Trakya University Scientific Research Ethics Committee (decision no: TÜTF-BAEK 2019/198, date: 13.05.2019).

Informed Consent: Individuals who agreed to participate in the study were informed about the research and verbal consent was obtained

Footnotes

Authorship Contributions

Konsept: B.T., M.E., Dizayn: B.T., M.E., Veri Toplama veya İşleme: G.D., Analiz veya Yorumlama: G.D., M.G., B.T., M.E., Literatür Arama: G.D., M.G., B.T., M.E., Yazan: G.D., M.G., B.T., M.E.

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