

## Point of Entry to The Health Care System A Community Based Study in Edirne, Turkey\*

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**Abstract:** Being the first contact point in the health system is one of the main features of primary health care. Our aim is to identify whether the primary care institutions in Edirne are used as a first contact point for health services.

A survey prepared for this study was carried out by face-to-face interviews with 407 families, a representative sample of the Edirne municipality region. The 1,008 adults and adolescents in these families were asked to answer the questions "to which health care institutions do you apply first when you seek health care?" and "to which health care institution do you think you should apply when you first seek health care?"

Most of the subjects thought of (70%) and used (79%) hospitals as their first contact point. The distance between their homes and primary care institutions, their age and educational level did not affect people's choice of health care institutions as a first contact point, although social insurance and socio-economic status did.

This study has revealed that primary health care institutions are not of the desired quality and quantity, with consequent underutilization of their services.

**Key Words:** Primary health care, health services accessibility, delivery of health care, social class, health insurance.

### Introduction

The organization of the current health care system in Turkey is very complicated. Many official and private institutions provide health care (1). All of them provide curative health care but the Ministry of Health provides both curative and preventive services. Primary health care services in Turkey are organized under a law dated 1961, which aimed to provide more and better qualified health care services, especially for the rural community. This law states that health care services are one of the main responsibilities of the government (2). Under this law health centers and health posts are the primary health care institutions organized to match geographical distribution. Health posts staffed by a midwife provide

health care in villages for approximately 2500-3000 inhabitants. The main functions of these posts are basic health care services for mothers and children. Health centers provide health care for 5000-10,000 inhabitants and are staffed by at least one physician, a nurse, a midwife and a medical secretary (3).

Maternal and child health and family planning centers and dispensaries for tuberculosis, syphilis and leprosy sufferers also provide primary health care. These are examples of the vertical organization of primary health care services in Turkey. Primary health care services are funded by the budget of the Ministry of Health, and preventive health services are free of charge for all citizens (4).

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According to the regulations of the Ministry of Health (5) the primary duties of health centers that are responsible for primary health care services are basically maternal and child health care, conceptional care, family planning services, vaccination of children, follow-up of contagious diseases, health education and environmental health services. Although there are population records kept and updated annually at health centers, these do not include sufficient information about individual health.

Primary health care services should be the point of entry to the health care system. Although there is a structure of primary, secondary and tertiary health care institutions in Turkey, people are free to choose their first contact point, except for those who hold a *green card* given by the government that covers the healthcare costs of poor people. Even tertiary health care institutions such as university hospitals can be chosen as a first contact point in certain consequences.

In this study we aimed to identify which institutions were chosen by people entering the health care system and the proportion of formal primary care institutions as selected first contact points.

## Materials and Methods

This cross-sectional descriptive study was performed with a representative sample from the Edirne municipality region that comprises 34,528 families and 114,937 individual. The sample was randomly selected using the population reports of the local governmental health office for 1999 by the multi-stage sampling method. The study universe was divided into 30 leagues of known geographic borders and population counts. All the leagues were treated as homogeneous. Subjects were randomly selected by the researchers from the leagues in numbers weighted to their populations. Selecting 7 families from the smallest league, the study sample included 407 families.

A survey prepared for this study was carried out by face-to-face interviews with 1008 adults and adolescents aged 15 or older from these families. Seventeen people were not included because of serious disease preventing the interviews. After collecting data regarding the demographic characteristics of the subjects, these were asked “to which health care institution do you think someone should apply to when he/she seeks health care?” and “to which health care institution do you apply when

you seek health care?” Their answers were grouped together as primary care institutions, hospitals and private health care institutions for statistical analysis. Health centers, workplace physicians, maternal and child health and family planning centers and tuberculosis dispensaries were classified as primary care institutions. The socio-economic status of the families was classified under 4 groups (bad, average, good and best) using a scale prepared by Neyzi et al. for Turkey (6).

## Results

The study sample comprised 1008 adults and adolescents, 51.6% of whom were women and 48.4% men. The average age was  $39.18 \pm 15.28$  years. The average number of people in these 407 families was  $3.34 \pm 1.27$ . There were 308 children younger than 15 in these families. When these families were classified according to their socio-economical status most of them were from the good and average classes (38.8% and 45.7% respectively), while the best (5.2%) and the bad (10.3%) classes comprised fewer families. Social security was provided by social security for employees (SSK) for 39.2%, by social security for governmental workers (ES) for 24.7%, by social security for employers (Bağ-kur) for 15.1% and by the ‘green card’ (YK) given by the government for poor people for 2.3%; 18.0% had no social security cover.

Average length of education was  $7.65 \pm 3.87$  years. This was  $6.38 \pm 3.67$  years (min: 0, max: 17 years) for women. The mode and median were both 5 years. Education length for men was approximately  $8.06 \pm 3.87$  years (min: 0; max: 17 years). The mode was 5 years and the median 8 years. Illiteracy rate was 4.5% (7.2% in women and 1.5% in men).

The distance between health centers and the family home was less than 500 m in 135 cases (33.2%), 500-1000 m in 127 cases (31.2%) and more than 1000 m in 145 cases (35.6%); 64.3% of the subjects knew the health center that provides primary health care for their region and 35.7% did not. In addition 356 of the subjects (26.7%) had a total of 88 different chronic diseases.

The answers to the questions “to which health care institution do you think someone should apply to when he/she seeks health care?” and “to which health care institution do you apply when you seek health care?” are shown in Tables 1 and 2. Group answers are presented in

Table 1. "Which health care institution do you think someone should first apply to when he/she seeks health care?"

	Frequency	Percentage
No idea	8	0.8
Nowhere	9	0.9
Pharmacy	5	0.5
Health center	138	13.7
Workplace physicians	39	3.9
Private practices	97	9.6
SSK hospital	279	27.7
Government hospital	260	25.7
University hospital	100	9.9
More than one choice, including secondary and tertiary health care institutions	42	4.2
More than one choice, including primary and secondary health care institutions.	31	3.1
Total	1008	100.0

Table 2. "Which health care institution do you apply to first when you seek health care?"

	Frequency	Percentage
No idea	1	0.1
Nowhere	5	0.5
Pharmacy	10	1.0
Health center	58	5.7
Workplace physicians	54	5.4
Private practices	81	8.0
SSK hospital	360	35.7
Government hospital	280	27.8
University hospital	103	10.2
More than one choice, including secondary and tertiary health care institutions	26	2.6
More than one choice, including primary and secondary health care institutions	30	3.0
Total	1008	100.0

Figure 1. The answers given to these 2 questions are significantly different from each other ( $X^2 = 764.478$ ;  $p < 0.001$ ).

Gender made no difference to people's answers to the questions "which health care institution do you think someone should apply to when he/she seeks health care?" ( $X^2 = 3.863$ ,  $p = 0.415$ ) and "to which health care institution do you apply when you seek health care?" ( $X^2 = 3.436$ ,  $p = 0.179$ ). Average age ( $F = 0.617$ ,  $p = 0.540$ ;  $F = 1.235$ ,  $p = 0.291$ ) and the average length of education ( $F = 1.015$ ,  $p = 0.363$ ;  $F = 1.080$ ,  $p = 0.340$ ) did not affect the answers significantly, although the

socio-economic status did ( $X^2 = 22.655$ ,  $p = 0.001$  and  $X^2 = 21.159$ ,  $p = 0.002$ ) (Figures 2, 3). Although the use of private health care institutions as first contact point was highest among the lowest socio-economic classes, it is still the lowest overall.

Social security had a significant impact on people's ideal choice of first contact point ( $X^2 = 46.859$ ,  $p < 0.001$ ) and on the institutions they applied to as first contact point ( $X^2 = 97.018$ ,  $p < 0.001$ ). As seen in Figures 4 and 5 the use of primary care institutions was highest in the ES and YK social security groups. Having a chronic disease did not make a significant difference to people's

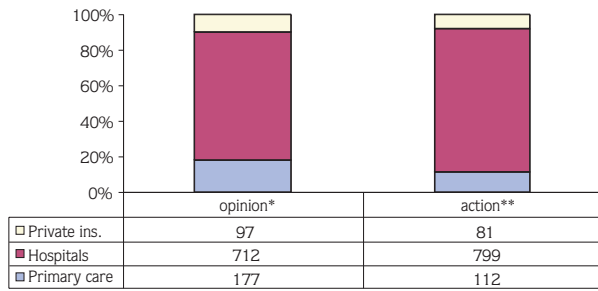


Figure 1. Preferences for first contact point.  
\* 986 suitable responses were classified  
\*\* 992 suitable responses were classified

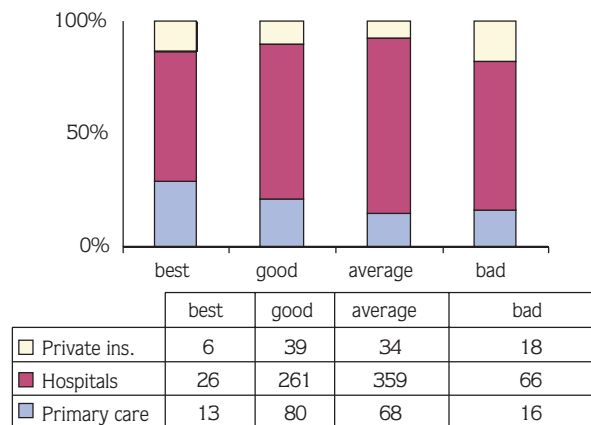


Figure 2. The relation between socio-economic status and which institutions are thought of as first contact points.

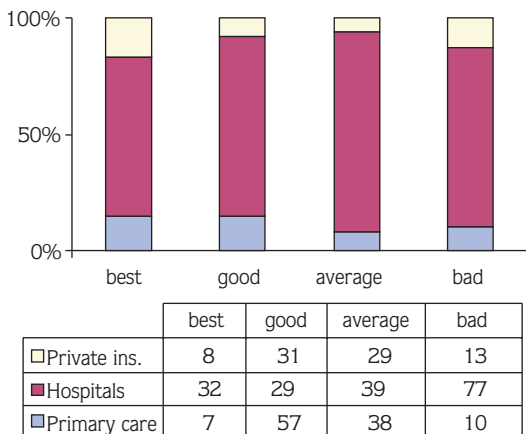
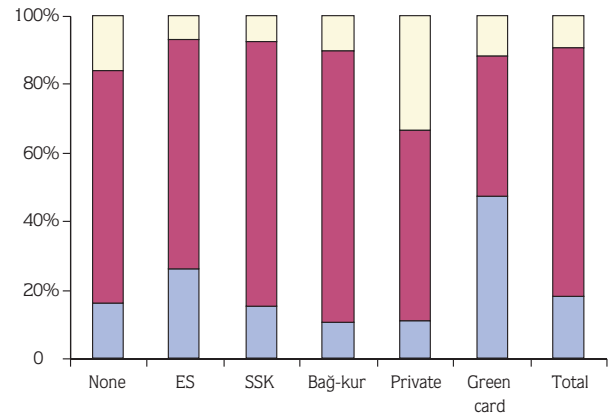


Figure 3. The relation between socio-economic status and which institutions are used as first contact points



	None	ES	SSK	Bağ-kur	Private	Green card	Total
Private ins.	28	18	30	16	3	2	97
Hospitals	115	165	302	118	5	7	712
Primary care	28	65	59	16	1	8	177

Figure 4. The relation between social security status and which institutions are thought of as first contact points.

ideas regarding their choice of first contact point ( $X^2 = 0.329$ ,  $p = 0.848$ ) and on the institutions they applied to as first contact point ( $X^2 = 1.127$ ,  $p = 0.569$ ).

The distance between people's homes and the primary care institution they are officially connected to did not make a significant difference to people's ideas regarding their first choice of first contact point and the institutions they applied to as first contact point ( $X^2 = 2.775$ ,  $p = 0.598$ ;  $X^2 = 4.478$ ,  $p = 0.345$ ).

## Discussion

Hospitals are the most popular institutions people think one should apply to as first contact point, and they are also used as a point of entry to the health care system. Those people who think that one should apply to primary care institutions and private institutions use hospitals as a first contact point, too. It has been shown in various studies that the level of use of health centers as a first contact point is very low (7,8). However, there are also studies showing that health centers are the institutions most used as first contact points (9,10). This study has revealed that people choose and use hospitals as a point of entry to the health care system. These findings are in accordance with the ratio that shows that visits to secondary/primary care institution polyclinics in Turkey is 1.3/1 (2).

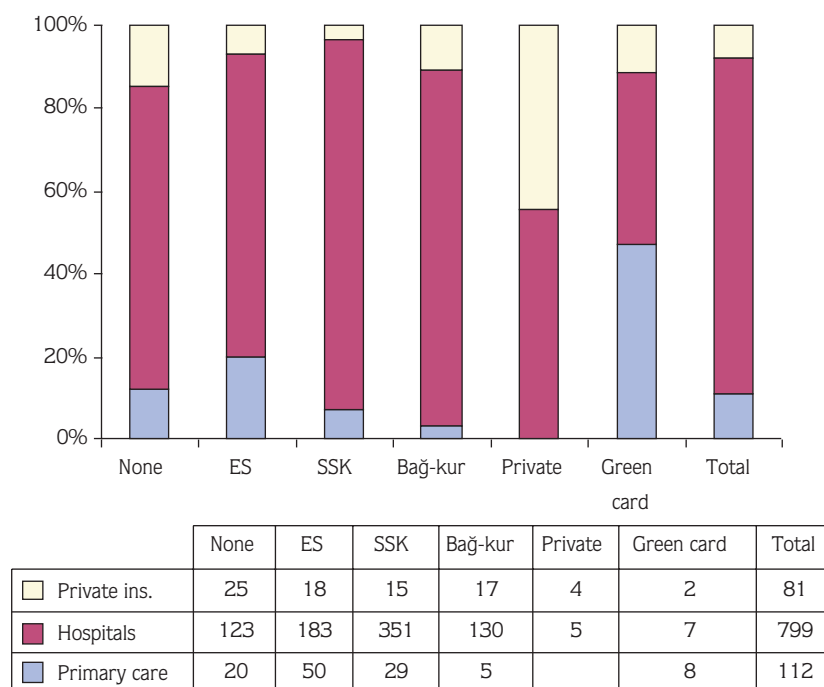


Figure 5. The relation between social security status and which institutions are used as first contact points.

In countries where primary health care is effective, people apply to these institutions first and 90% of their health problems can be solved there. Only 10% of them are referred to a secondary health care institution (11). In Turkey however, the patients contact other specialists directly rather than primary care physicians. This is a difficult situation for both the patient and the physician. It increases the work load of polyclinics at hospitals and reduces the time that the physician can spend with the patient. In this limited time the physician cannot offer a bio-psycho-social approach and can only treat physical illnesses. The physicians grow tired and the patients are generally not satisfied with the therapy.

In this study age, sex and educational status did not affect people's choice of first contact point with the health care system, although socio-economic status and social insurance did. Hospitals were the preferred institutions in all situations. Private institutions were preferred more in the "bad" socio-economic class. This may be because those people whose perception of their health status is bad (12) chose the health care institutions they trusted more which are generally private ones (7). The high work load of hospitals may also limit their choice.

The preference for primary care as a first contact point was more prevalent in the ES and "green card" groups. Workplace physicians may increase this rate for the ES group because they are categorized under primary care. For "green card" users the reason is the legal obligations to apply to health centers first.

One Ministry of Health study showed that the most preferred institutions for first contact in the Trakya region that includes Edirne are private ones (7). This result is not agreement with this study. However the rural population of the Trakya region that was not covered by our study may be the cause of this difference, because those individuals mostly lack social security cover. We also found that those who do not have social security cover generally prefer private health institutions.

The distance between people's homes and the health center did not affect people's preference and choice of first contact point institutions. Health centers are probably used more if they are near people's homes, but they still do not apply to health centers first even if they are very near.

Primary healthcare institutions in the Edirne region are thus unable to provide one of their main functions, that of being the point of entry to the health care system. It is thought that this applies all over the country. The current health care system in Turkey needs to be reformed to provide effective primary health care.

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