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## Patients' Opinions on Family Doctor Accessibility in Estonia

One of the cornerstones of the Estonian health care reforms has been the reorganization of the primary level medical care. It was started in 1991 by commencing training for family doctors [1, 2]. Since 1993, the list of medical specialties in Estonia also contains family medicine, and by the present time more than 800 family doctors have been trained. In 1998 a new financing scheme for family doctors came into force, foreseeing the establishment of patient lists. It introduced a combined payment mechanism and a partial gatekeeping function for family doctors, and rendered the status of an independent contractor to family practitioners [3].

The aim of the reform in primary health care was to establish the primary health care system that is easily accessible and is based on trained and fully responsible family practitioners.

Several studies have shown that the access to the doctors is one of the most important determinants of patient satisfaction with the care [4, 5]. Although priorities regarding different aspects of family practice vary significantly among different countries, the absolute requirements for good family practice as reported by patients are: the possibility of making appointments with in a short time, quick service in urgent situations, a family physician who really takes his/her time to listen and talk during the consultation. All these priorities refer particularly to accessible clinical care [6].

The common policy in the Estonian family medicine is that patients with urgent problems should be seen on the same day, while other patients should be granted an appointment in three days. These standard rules are fixed in the family doctor's job description. Since October 2002, when the Health Insurance Act came into force, all patients who have health insurance can visit their family doctors for free. According to the same act, family practitioners may ask up to EEK50 (€3.3, US\$3.9) for a home visit.

The aim of the study was to investigate the temporal accessibility and financial accessibility of family doctors in Estonia from the patients' point of view.

### Material and Methods

#### Study Design and Sample

The analysis was based on the population survey "People's Expectations about the Health Care", conducted in November and December 2002. The survey was organized by the University of Tartu, the Ministry of Social Affairs, and with the help of the social research company EMOR.

A random sample of Estonian residents, (n=999) aged 15 to 74, was personally interviewed by the trained personnel of EMOR. A structured questionnaire was used. The sample was self-weighted, ie the proportional model of the population was used, where all the respondents represented an equal number of people in the population. The gender, age, and ethnic structures of the sample corresponded to those of the population of Estonia (table 1).

*Table 1*  
**Characteristics of respondents by gender, age, nationality, and the place of residence [9]**

Characteristic	No. (%) of participants	No. (%) of total population*
Gender:		
male	464 (46)	486,255 (46)
female	535 (54)	560,666 (54)
Age (years):		
15-24	191 (19)	200,174 (19)
25-34	176 (18)	184,222 (18)
35-49	276 (28)	289,612 (28)
50-64	232 (23)	242,256 (23)
65-74	124 (12)	130,657 (12)
Nationality:		
Estonians	659 (66)	690 130 (66)
non-Estonians	340 (34)	356 791 (34)
Place of residence:		
capital	304 (30)	318 439 (30)
urban area	399 (40)	418 206 (40)
rural area	296 (30)	310 276 (30)

\*January 1, 2001.



### Questionnaire

In order to evaluate the accessibility of family doctors, the respondents were asked how many times they had visited their family doctor, as well as other specialists, during the previous 12 months and how much time it took on average to wait for an appointment at the family doctor. The waiting period has been determined as follows: 1) the same day; 2) within 1-2 days; 3) within 3-4 days; 4) within 5-7 days; and 5) more than a week. Also, the respondents were asked whether they had a possibility of contacting the family doctor by phone when there was a need and finally, they were asked to assess whether their decision to ask for a home visit would be affected by the home visit fee of EEK25, 50, 100, or 200 (€1.7, 3.3, 6.7, or 13.3, respectively). The acceptability of the fee was measured by a Likert scale from "not at all" to "affects a lot." The questionnaire also included questions about patient demographics and, the health status, as well as about various aspects related to family practice: the acceptability and the satisfaction with the family practice.

The data from 2002 were compared with the data of a similar study performed in 1998 [7]. Also, the data of the official health statistics of Estonia have been used in order to describe the changes of the accessibility of family doctors.

### Statistical Analysis

The data were analyzed by using SPSS software (SPSS Inc., Chicago, IL, USA). To evaluate the statistical significance of differences between the groups, chi-square test was used. To estimate the relations between variables, the Spearman correlation coefficient was used.

## Results

### Access to Family Doctors

*Number of visits to a family doctor.* Out of all the respondents, 59% had visited the family doctor during the previous 12 months and 41% had visited a specialist. In

1998 the respective numbers were 52 % and 48% (7). According to the results, in 2002 the Estonian people visited a family practitioner 2.48 times on average during the previous 12 months.

The people who visited their family physicians most often during the previous 12 months were over 50; with an elementary or basic level of education; an income of less than EEK3,000 (€196); and of rural origin (table 2).

Table 2

Number of visits to a family doctor by different social groups

Characteristic	Average number of visits during the previous 12 months
Age:	
<24	2.16
25-34	2.13
35-49	2.34
50-74	2.94
Education:*	
elementary or basic	3.59
secondary or vocational	2.11
secondary	
higher	2.02
Income per family member:*†	
<EEK1000	2.27
EEK1001-2000	3.69
EEK2001-3000	2.82
>EEK3000	1.96
Place of residence:*	
capital	1.62
city	2.80
town	2.67
country-side	3.02

\*The differences between the groups were significant ( $p < 0.001$ , chi-square test). † €1=EEK15.65.

Table 3

**Number of ambulatory visits 1998-2002\***

No. of ambulatory visits			Average number of ambulatory visits per Estonian resident	
Year	total	to family doctors (%)	total	to family doctors
1998	8.141,515	1.336,739	5.87	0.96
1999	8.073,029	(16.4)	5.60	1.06
2000	8.151,104	1.525,673	6.00	1.40
2001	8.013,315	(18.9)	5.87	2.03
2002	7.955,184	1.972,280	5.86	2.66
		2.763,460		
		(34.5)		
		3.614,688		
		(45.4)		

\*Source: ref. 8.

According to the official data of the Estonian Health Statistics, since 1998 the number of visits provided by family doctors has been continuously increasing, whereas the number of the all ambulatory visits in Estonia is almost the same (table 3).

*Possibility of contacting family doctor by phone.* Out of all the respondents, 72% said that if there was a need, they had a possibility of contacting their family doctor by phone, whereas 12% did not know whether they had or did not have such a possibility and 16% said that they did not have the possibility of contacting the family doctor by phone. People from rural areas and also people from small cities had significantly more such a possibility when compared with people from the capital (75%, 78%, and 58% respectively) (p=0.001).

*Financial accessibility of family medical care.* Almost 55% of the respondents said that a EEK25 (€1.7) home visit fee would not affect their decision to call a doctor home and 12.5% said that it would seriously affect it (table 4). The present fee of EEK50 (€3.3) would not affect the decision of 32% of the respondents (table 4).

Table 4

**Number of the respondents (%) answering the question: "How much does possible home visit fee affect the decision to call a doctor home?"**

Answer	Cost of home visit (EEK)*			
	25	50	100	200
Not at all	196 (19.6)	93 (9.3)	32 (3.2)	52 (5.2)
Not significantly	351 (35.2)	227 (22.7)	103 (10.3)	38 (3.8)
Rather affects	132 (13.2)	305 (30.6)	190 (19.0)	135 (13.5)
Affects seriously	125 (12.5)	276 (27.7)	608 (60.8)	761 (76.1)
Difficult to say	18 (1.8)	14 (1.4)	15 (1.5)	14 (1.4)
No answer	176 (17.7)	83 (8.3)	52 (5.2)	0

\*1 EUR=15.65 EEK.

A correlation was found between the acceptability of a visit fee and the income of the respondents (income per person in the previous month) – the smaller the income, the more it would affect the decision to ask for a home

visit (table 5). The correlation was calculated without the respondents who did not want to reveal their income or did not answer the question about the acceptability of a visit fee. Also, the ones who answered "it is difficult to say" were left out of the calculation.

Table 5

**Relation of a possible home visit fee and the respondents' income (% of the respondents who think that the home visit fee would affect their decision to call a doctor)**

Home visit fee (EEK)*	Monthly income per person (EEK)*				Spearman correlation coefficient†
	<1,000	1,001-2,000	2,001-3,000	>3,000	
25	32	30	21	17	0.27
50	70	69	48	44	0.28
100	92	86	75	65	0.21
200	96	91	90	80	0.13

p < 0.0001 in all cases (chisquare test).  
\*1 EUR=15.65 EEK.

*Waiting Period for Seeing a Family Doctor*

The waiting time for an appointment to see the family doctor was short for most of the respondents. The family doctor usually admitted 60% of the respondents on the same day that the patients requested, 22% of the patients were admitted within 1–2 days, 9% within 3-4 days, and 9% of the respondents had to wait up to 5 days. Waiting periods were significantly different in different regions in Estonia. In the capital, only 44% of the patients were admitted on the same day. Thirty percent of the patients living in the capital had to wait 3-7 days before being admitted, whereas in the rural areas the waiting period was mostly not longer than two days.

The comparison of the data with a similar study performed in 1998 revealed that there is no significant differences in waiting time in 1998 and 2002 (p=0.068) (Figure 1).

**Figure 1.** Waiting time for an appointment to the family doctor in 1998 and 2002. Black – on the same day; gray – during 3-4 days; open – more than 5 days.

**Discussion**

The study mainly focused on the population's opinion of the accessibility of family doctors in Estonia. The main purpose of the primary health care reform in 1997 was to introduce an easily accessible family medicine system, which is based on trained and fully responsible family doctors.

As the population survey reveals and the official statistics show, the number of the outpatient visits to a family doctor has increased year by year, whereas the number of the outpatient visits to a specialist has decreased [7, 8]. It reveals that the workload and the responsibility of family doctors is also increasing. More and more health problems are solved by family doctors without referral to specialists. The fact that the number of visits to a family doctor is bigger among the patients who are less edu-

cated, whose income is lower and among those from the rural areas is in general favorable, since it reflects a good access to family doctors also for people of lower social class. Those patients may face more health problems that require medical attention and the primary care is accessible to them. However, the reason can also be that they face financial and geographical barriers to use specialist health care services. According to the Health Insurance Act of 2002, the fee for visiting a specialist is 1.7-3.3 Euros in Estonia. All outpatient visits to family doctors are free for people with health insurance. The average of insurance coverage is about 95% [9]. According to the Health Insurance Act, family doctors are allowed to ask up to 50 EEK (up to 3.3 EUR) for a home visit. The study revealed that the present home visit fee would affect the decision of asking for the home call for 58% of the people. As there is a correlation between the acceptability of a visit fee and the people's income, it would be politically wise to consider giving compensation for a visit fee.

In recent years the use of the telephone to deliver health care advice becomes more and more popular. Telephone consultations are increasingly accepted as alternatives to face to face contacts and it makes the family practice more accessible [10, 11]. In our study, 72% of the patients said that they had had good possibilities of contacting their family doctor by phone. The number is comparable with the study in Slovenia [12]. There exist some problems with the telephone access in the capital, where most of the family doctors work continuously in bigger centers or polyclinics. Studies have shown that in larger

settings the care is much more fragmented and dispersed throughout the organization and usually the patients do not have direct access to a doctor [13].

Our study demonstrated that according to population surveys, the temporary access of family medical care can be considered as good – about 60 percent of the people can visit the ir family practitioner on the same day if they want to. The number of those patients who have had to wait for more than five days has slightly increased during five years, but the survey data do not give any information on whether they had to wait because the physician could not see them earlier or the available time did not suit the patient. Nevertheless, family doctors in Estonia are well accessible, especially if the data of our study are compared to other similar studies [14, 15]. However, trends in some countries have shown that new challenges have confronted primary care [16, 17]. If we keep the needs of persons and patients in sight and design systems to meet those needs, primary care will thrive and our patients will be well served [17].

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**Aim.** To investigate the accessibility of family doctors in Estonia from the patients' point of view.

**Methods.** Face to face interviews using structured questionnaires were performed. A random sample of the Estonian residents, aged 15-74 years, was studied (n=999).

**Results.** The number of visits provided by family doctors has been continuously increasing since 1998. Out of 999 respondents, 59 % visited the family doctor during the previous 12 months. The average number of visits per Estonian resident in one year is 2.48. Out of 999 interviewed persons, 72 % said that they had a possibility of contacting their family doctor by phone. The waiting time for an appointment was short in most cases. The family doctor admitted 60 % of the Respondents on the same day the patients had requested; 22 % of the patients were admitted within 1-2 days and 9% of the patients were admitted within 3-4 days. Only 9% of them had to wait more than 5 days. The current home visit fee in Estonia would have affected the decision of the home call of 58 % of people. There was a correlation between the acceptability of a visit fee and the people's income.

**Conclusion.** The accessibility of family doctors can be considered good in Estonia.

**Key Words:** family practice; health care reform; health services accessibility.

## Сприйняття пацієнтами доступності сімейного лікаря в Естонії

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**Мета.** Дослідження доступності сімейних лікарів в Естонії з точки зору пацієнтів.

**Методи.** Були проведені інтерв'ю обличчям до обличчя з використанням структурованих анкет. Вивчена випадкова вибірка з жителів Естонії (n=999) у віці 15-74 років.

**Результати.** Кількість відвідувань, передбачених сімейним лікарем постійно зростала з 1998. З 999 опитаних, 59% відвідали сімейного лікаря протягом попередніх 12 місяців. Середня кількість відвідувань в Естонії в один рік склала 2,48. З 999 опитаних осіб, 72% сказали, що вони мали можливість зв'язатися з їх сімейним лікарем по телефону. Час очікування для призначення був коротким в більшості випадків. Сімейний лікар приймав 60% респондентів в день звернення пацієнтів; 22% пацієнтів були допущені прийняті протягом 1–2 днів і 9% пацієнтів були допущені протягом 3-4 днів. Тільки 9% з них довелося чекати більше 5 днів. Плата за відвідування на дому в Естонії вплинула на рішення зателефонувати лікарю у 58% людей. Виявлена кореляція між доступністю плати за відвідування і доходами населення.

**Висновок.** Доступність сімейних лікарів можна вважати гарною в Естонії.

**Ключові слова:** сімейна медицина; реформа охорони здоров'я; доступність медичних послуг.

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