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## Task profiles of district doctors in Estonia and general practitioners in Finland

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*Objective* – To compare the task profiles of primary care doctors in two societies: district doctors in Estonia and general practitioners in Finland.

*Design* – A uniform questionnaire was developed and used in 30 European countries in 1993 (The European Study of GP Task Profiles). The questionnaire was sent to a random sample of Estonian district doctors and Finnish health centre doctors. Data from 139 respondents in Estonia and 239 respondents in Finland were obtained.

*Main outcome measures* – Personal and practice information, proportion of doctors performing certain medical procedures in their practices by themselves and being the first contact in relation to different problems.

*Results* – The Finnish general practitioners (GPs) had more consultations per day, the Estonian district doctors made remarkably more Finhome visits. Participation in on-duty work was 82% among the Finnish and 22% among the Estonian doctors. Most of the Finnish GPs worked by appointment, while this was uncommon in Estonia.

More than 80% of the Estonian district doctors reported that they seldom or never performed the listed procedures by themselves. In Finland, more than 80% of the respondents carried out the procedures almost always by themselves. Handling children's and women's health problems was more frequent in Finland than in Estonia. The profiles of managing acute problems and problems of the elderly people were quite similar in both countries. The tackling of psychosocial problems as the first contact showed lower performance in both countries compared with somatic health problems.

*Conclusions* – The task profiles of the Estonian district doctors and the Finnish GPs differed considerably. The distribution of the Estonian doctors' answers gives evidence for the existence of specialization already within primary health care where certain problems almost never reach the district doctor. The results of the present study supported the curriculum design for the retraining of currently practising district doctors.

Estonia, like other Central and Eastern European countries, reorganized her primary health care system after World War II to adapt to the Soviet model, in which primary health care was provided by a range of directly accessible specialists working in polyclinics. The number of doctors in Estonia in 1993 was 3.4 per 1000 inhabitants (1), 37% of them working full time in polyclinics (2). General practice did not exist, but district doctors, providing care mostly in internal medicine, formed the biggest group of doctors whose work most

resembled that of general practitioners (GPs) in Western Europe. Estonian district doctors fulfilled several of the international criteria set for GPs, such as providing primary, personal and continuing care, home visits, and management of chronic, recurrent, and terminal diseases (3–5). Still, big differences existed in the scope of provided services, selection of patients, doctors' education, and identity and philosophy of general practice. Medical education, one aim of which was early undergraduate specialization, corresponded to the practical organization of health care (6).

Dissatisfaction with the previous health care system, among both providers and users, led to reforms in the early 1990s. These were further accelerated after the independence of Estonia was recognized in 1991. One component of the reforms was the introduction of family doctors to the Estonian health care system. Special education in Family Medicine started in 1991, the trainees being mostly former district doctors. Family Medicine was recognized as a specialty, and the first family doctors graduated in 1993. The new law on health care organization 1992 laid the responsibility for arranging the 1st (general) and 2nd level (specialist) health care on municipalities, while the 3rd level specialist care was maintained as the responsibility of the state. However, the division of tasks between family doctors and specialists has not been finally established. Although official statistics partly cover diagnoses made in polyclinics and ambulatories, no research data are available on the task profile of district doctors in Estonia.

While implementing changes in primary health care, the Nordic type of GPs, i.e. doctors with a wide scope of services in both curative and preventive medicine, has been seen as a model for family doctors' education in Estonia. Estonia has developed a number of cooperation programmes with Nordic countries. The closest contacts in training and research in general practice are with Finland, which started in 1989 (7). General practice has a long tradition in Finland. After World War II the tasks of primary health care have rested on municipalities. However, in the 1950s and 1960s the development of the Finnish health care system focused on building up a network of hospitals. According to the Primary Health Care Act 1972 every municipality had to establish a health centre to provide its citizens with medical and preventive care. After the enforcement of the law huge investments were made to promote primary health care in the 1970s and 1980s (8). There were 2.5 doctors per 1000 inhabitants in Finland in 1993, 25% of them working in health centres (9). One major task of the Primary Health Care Act was to elaborate a division of work between the primary level and hospitals. Due to the economic depression that started in 1991, provision of medical services at an adequate level has become even more important. The new law on financing health care, passed in 1993, enhanced the authority of municipalities in deciding which health services should be provided in health centres and which services should be bought from the hospital organization (8).

The aim of this report was to compare the task profiles of primary care doctors, district doctors in Estonia and GPs in Finland, in two neighbouring countries. They represent different societies: Estonia, once a Western social system under Soviet domination for 50 years, and Finland a representative of a Nordic welfare society belonging to the Western society in terms of medical education and health care. The present investigation focuses particularly on the comparison of procedures which the Estonian district doctors and Finnish GPs perform themselves, and on cases where physicians act as first-contact doctors.

## **MATERIAL AND METHODS**

The data for this report were obtained from the European Study of GP Task Profiles, organized by the NIVEL foundation in the Netherlands and carried out in 1993 in 30 countries (10).

The national coordinators of the study (the authors of this paper being national coordinators of their respective countries) participated in developing a uniform questionnaire and translating it into their own languages. To check the adequacy of the versions, the texts were then translated back into English. The questionnaire was mostly structured, with precoded answers, and consisted of seven sections with 408 variables on numerous items. Among other sections the questionnaire included GP's activity as the doctor of first contact in health-related matters and in minor surgical and investigative procedures. A series of health problems were presented and doctors were asked to describe their involvement on a precoded scale.

A random sample of the Estonian district doctors was drawn from the register of the Ministry of Social Affairs, and a random sample of the Finnish health centre doctors was drawn from the register of the Finnish Medical Association. The questionnaire was mailed to those included in the samples in spring 1993 in Finland and in summer 1993 in Estonia. A reminder was sent to all participants in Finland 2 weeks later, and to Estonian participants 4 weeks following the initial mailing.

The response rate was 62% (139 respondents) in Estonia and 42% (239 respondents) in Finland. The age and sex structure of the respondents corresponded to that of the random sample. However, Russian-speaking doctors in north-east Estonia are under-represented, probably because they were not able to communicate in the Estonian language.

Statistical analysis was performed by SPSS statistical package.

## RESULTS

### Personal and practice information

The large majority of the Estonian respondents were female (94%), the respective proportion being 54% in Finland. 16% of the Estonian and 49% of the Finnish respondents had completed their specialist training in family medicine/general practice, or were still attending training. There were no differences between the regular working hours of the Estonian and Finnish doctors (Table I). The Finnish GPs tended to have more consultations (including phone consultations) per day. The Estonian district doctors made remarkably more home visits than the Finnish GPs (69 Finnish doctors had omitted this question). In Estonia, only 22% of the doctors replied that they used to work on duty (those who did spent on average 9 h a week on it), while the majority of the Finnish respondents (82%) acknowledged participation in on-duty work (on average 9 h per week also). A few Estonian doctors (12%) made hospital visits. In Finland, 39% of the GPs also worked in the in-patient departments of their health centres.

Most of the Finnish GPs worked by appointment, while in Estonia the majority worked without appointment (Table II). Of the Estonian doctors who made appointments, 90% reported that a non-acute patient could usually see his/her doctor on the day of arranging the appointment. In Finland, 21% of the GPs could arrange an appointment for the same or the following day, while 19% even reported that a non-acute patient usually had to wait at least two weeks (Table III). On average, the Estonian doctors reserved 15 min and the Finnish doctors 18 min for one patient when they worked by appointment (Table I).

[TABLE 1]

[TABLE 2]

[TABLE 3]

**Medical procedures**

The GPs were asked whether a certain medical procedure in their practice was carried out by themselves or by a specialist. The alternatives suggested were: (I do the procedure by myself) almost always, usually, occasionally, and seldom/never. The difference in the distribution of answers of the Estonian and Finnish doctors was highly significant in the case of all procedures.

More than 80% of the Finnish GPs carried out most of the required procedures by themselves almost always or usually (Fig. 1). More than 80% of the Estonian district doctors reported that they seldom or never performed the majority of the required procedures by themselves. The removal of a rusty spot from the cornea, setting up an intravenous infusion device, strapping an ankle, and suturing a wound showed the highest performance percentages in Estonia, but only 10–26% of the district doctors carried out these procedures by themselves almost always or usually.

[FIGURE 1]

**First contact in health problems**

The role of the GPs as the first contact in health problems was inquired in relation to 27 problems, which we classified into five categories: children's, women's, acute, elderly people's and psychosocial problems.

Handling children's health problems was more frequent in Finland than in Estonia (Fig. 2A). About 80% of the Finnish GPs served almost always or usually as the first contact in the case of the problems suggested, whereas the respective rates among Estonian doctors ranged between 17 and 35%.

The largest differences were in the tackling of women's problems (Fig. 2B), such as prescribing oral contraceptives or treating menstrual irregularities: ~ 70% of the Finnish GPs served almost always or usually as the first contact, whereas the respective figure in Estonia was less than 10%. 'A woman aged 50 with a lump in the breast' produced the highest figures in this category: 90% of the respondents in Finland and 36% in Estonia acted almost always or usually as the first-contact doctors.

The profiles of managing acute problems (pain in the lower back, chest and stomach as well as paralysis) were quite similar: doctors in both countries were the providers of the first contact in about 80% of cases (Fig. 2C). The largest differences were revealed in handling acute surgical problems.

The handling of health problems of the elderly people was quite similar in both countries (Fig. 2D).

The tackling of psychosocial problems as the first contact showed lower performance in both countries, compared with somatic health problems (Fig. 2E).

Problems related to work or anxiety showed the highest rates (~ 50% in Estonia and 70% in Finland), whereas the rates of handling problems in couple relationships, for example, were quite low. However, the difference between the countries in the service of first-contact doctors in the case of psychosocial problems was statistically significant.

[FIGURE 2A]

[FIGURE 2B]

[FIGURE 2C]

[FIGURE 2D]

[FIGURE 2E]

## DISCUSSION

The data of the present study reflect the situation in the primary health care of Estonia and Finland in 1993. That was a year of major changes in the health care of both countries. In Estonia, insurance-based financing of health care came into force in 1992, and the first family doctors started their practice in 1993. In Finland, the collective responsibility of the health centre as a service provider is being replaced by a more personal responsibility of individual doctors. The change in the financing of health care in 1993 shifted more responsibility to the municipalities in organizing and funding health care services, health centres working now as fundholders of hospital care (8,11).

The working hours of the doctors in Estonia and Finland, both being employees, were very similar. The average number of daily visits and phone consultations was smaller in Estonia, whereas the number of home visits was smaller in Finland. In Estonia home visits have been seen as an essential and important part of the district doctors' work, while in Finland patients have been mostly encouraged to attend doctors at the health centres. The number of phone consultations reported in this study is consistent with the results of a thorough investigation of phone consultations in Finnish general practice (12).

The lower level of communication in Estonia – 222 phones per 1000 inhabitants in Estonia compared with 534 in Finland in 1993 (13) – especially in rural areas, has diminished the use of the phone both in consulting a doctor and in resorting to the appointment system. Patients in Estonia also depended to some extent on the availability of public transport, particularly in rural areas. The majority of families had no car, the number of personal cars per population in 1993 being 3.1 times smaller in Estonia than in Finland (13), and taxi services were too expensive. Under such circumstances, the intended appointment system did not work. On the other hand, once the Estonian patient came to see the district doctor he/she was usually received on the same day (Table III). However, in this case doctors could not schedule their day very exactly; working overtime in some periods has not been at all exceptional. Finnish data demonstrated detailed scheduling in the work of health centres where a patient could meet a doctor mainly by making an appointment in advance. A negative effect of this mode of work is that it leads to long waiting lists: one fifth of the Finnish GPs reported that their patients usually had to wait more than two weeks to see a doctor. With the introduction of doctor's personal responsibility in Finland, a doctor should provide care for his/her patient within three days, which shortens waiting times significantly.

The Estonian district doctors do not normally participate in duties outside working hours. However, in large polyclinics they act as doctors on duty on Saturday mornings, and in smaller towns they occasionally undertake duties at hospitals. In rural areas, where doctors live within the local community, patients usually call them in cases of emergency, despite the availability of a separate emergency service (ambulances with doctors) covering all

Estonia and functioning 24 h a day. Formally, district doctors are not responsible for providing service outside working hours. In Finland, oncalls form an essential part of the GPs' work.

The task profiles of the Estonian district doctors and the Finnish GPs differed considerably. Most of the researched procedures rarely performed by the Estonian district doctors fell mostly within the responsibility of specialists, which indicates the important role of the latter in primary care. In the European survey, Finland had the highest involvement of GPs in the application of medical techniques, while Estonia belonged to the group of countries with the lowest involvement, together with other countries of Central and Eastern Europe, Italy, Portugal, and Spain (10). Therefore it is not surprising that the equipment level which Estonian and Finnish primary care doctors have at their disposal differs significantly (14). In Estonia, a situation where most procedures are performed by specialists was considered more economical (less need of equipment) and more likely to ensure higher quality (based on more experience). However, the performance of office procedures by GPs still remains a topic that inspires heated debate (15).

Cases where district doctors served as the first contact were usually or always limited to some acute problems and problems of seniors. Children's, women's, and psychosocial problems were usually not presented to the district doctor. Such a distribution of doctors' answers gives evidence of the existence of specialization already within primary health care where certain problems almost never reach the district doctor. According to their education (6th undergraduate year and internship in internal medicine) and self-determination, the district doctors of Estonia normally identified themselves as internists.

The results of the present study supported the curriculum design for the retraining of currently practising district doctors: great emphasis is now laid on acquiring skills for handling a large variety of problems related to all age groups and both sexes, for performing the necessary procedural skills, as well as on developing an understanding of the identity of the family doctor. The first experience of this retraining has been promising. The Estonian training programmes rely to a certain extent on specialists for procedural training, but it sometimes feels some reluctance to teach general practitioners "their procedures" because of a competitive environment, mentioned also by others (15). Documenting current patterns of procedural practice provides information needed in planning training, physicians' supply, health care financing, and policy.

Considering that by 1996 about 150 district doctors had completed their training in family medicine in Estonia, and that from 1993 graduates have entered the profession after a common internship, the scope of services is expected to broaden. However, this would serve as a topic for further studies and evaluation.

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## TABLES AND FIGURES

Table I. Some average characteristics ( $\pm$  SD) of the work of Estonian district doctors and Finnish health centre doctors.

	Estonian, n = 139	Finnish, n = 239	p-value (t-test)
Regular working hours/week	37 $\pm$ 6	38 $\pm$ 4	p > 0.05
Consultations/day	16 $\pm$ 5	19 $\pm$ 8	p = 0.01
Home visits/week	16 $\pm$ 7	2 $\pm$ 8 <sup>2</sup>	p < 0.001
Phone consultations/day	4 $\pm$ 3	6 $\pm$ 3	p < 0.001
Consultation time (min.) when using appointments	15 $\pm$ 4 <sup>1</sup>	18 $\pm$ 4	p < 0.001

<sup>1</sup> n = 56; <sup>2</sup> n = 170.

Table II. Distribution of the Estonian district doctors and the Finnish health centre doctors according to use of the appointment system.

	Estonian, n = 137	Finnish, n = 237
No appointments	74 (54%)	2 (1%)
< 50% of non-acute patients by appointment	25 (18%)	7 (3%)
> 50% of non-acute patients by appointment	17 (12%)	35 (15%)
(Almost) all patients by appointment	21 (15%)	193 (81%)

p < 0.000001 (chi-square test).

Table III. Distribution of patients (%) according to the time they are seen by their doctor with a non-acute problem.

	Estonia	Finland
Same day	90%	8%
Following day	10%	13%
During 2–6 days	0	35%
During 1–2 weeks	0	25%
> 2 weeks	0	19%

$p < 0.000001$  (chi-square test).

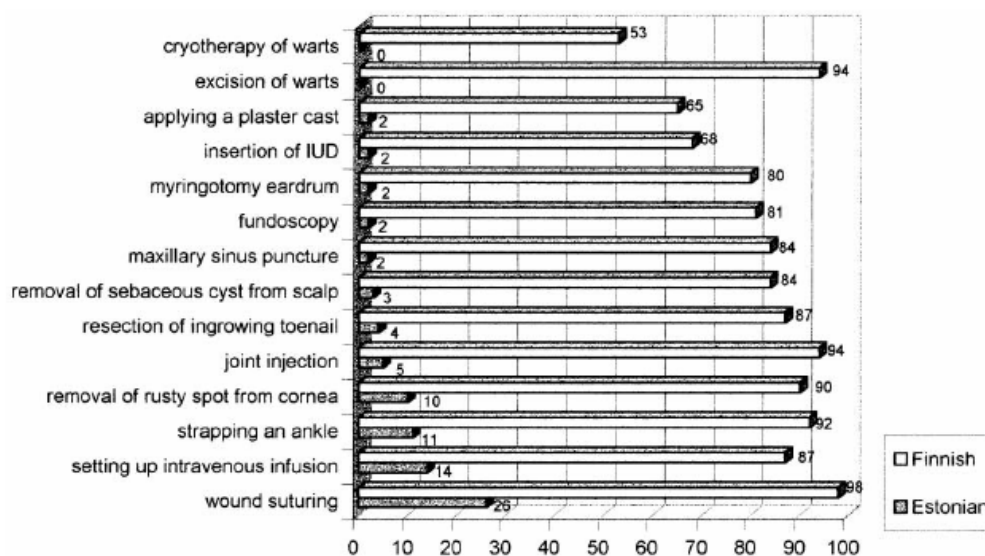
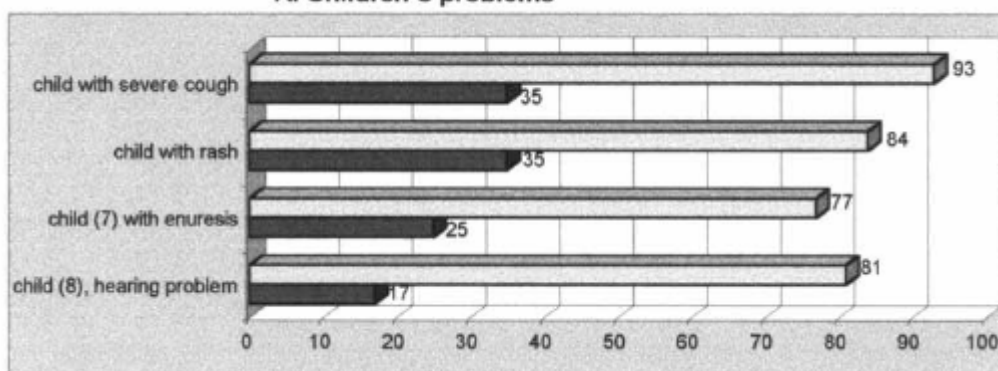


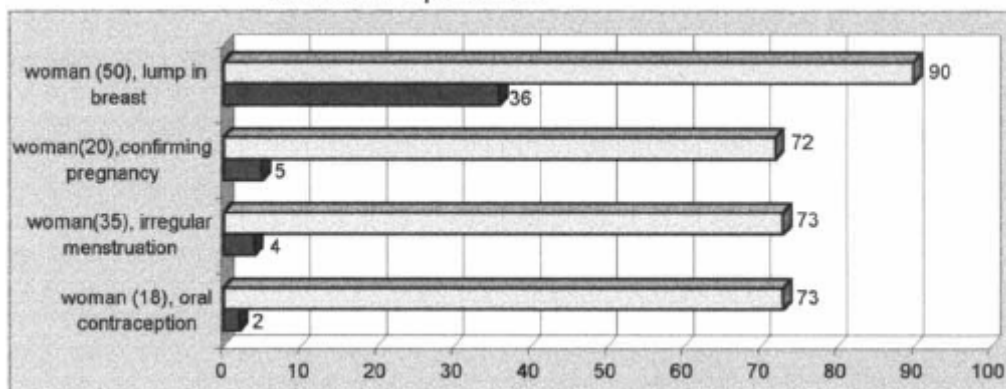
Fig. 1. Percentage of doctors reporting to perform the following procedures by themselves almost always or usually.

#### A. Children's problems

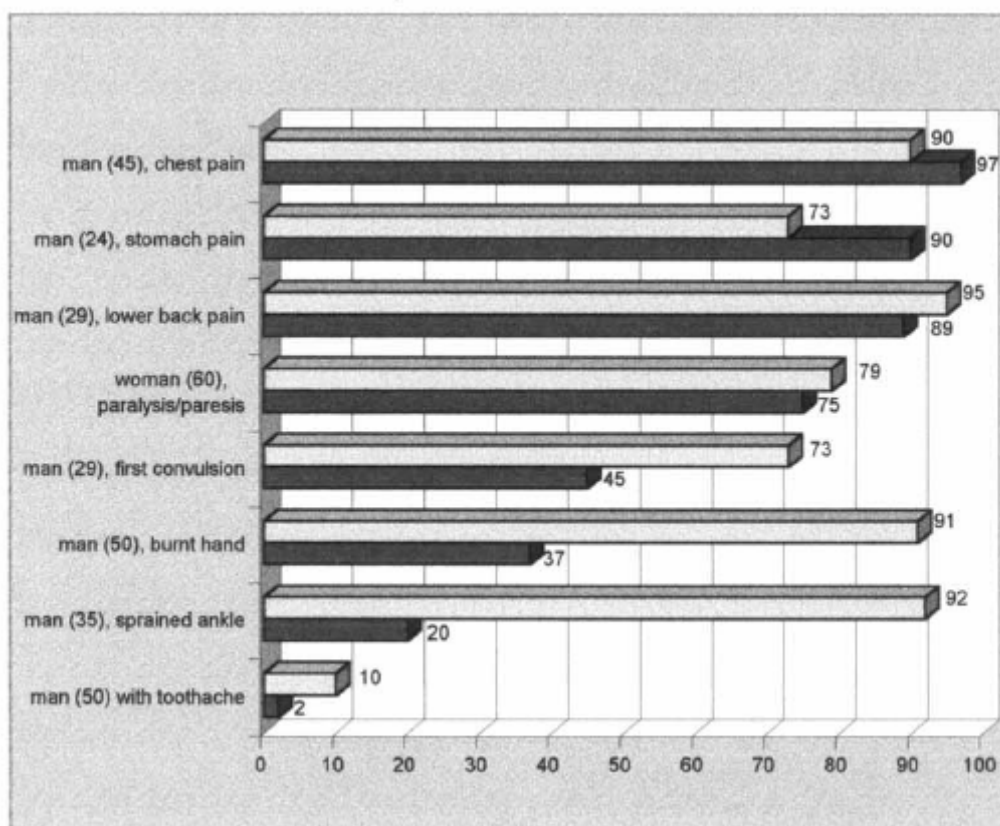




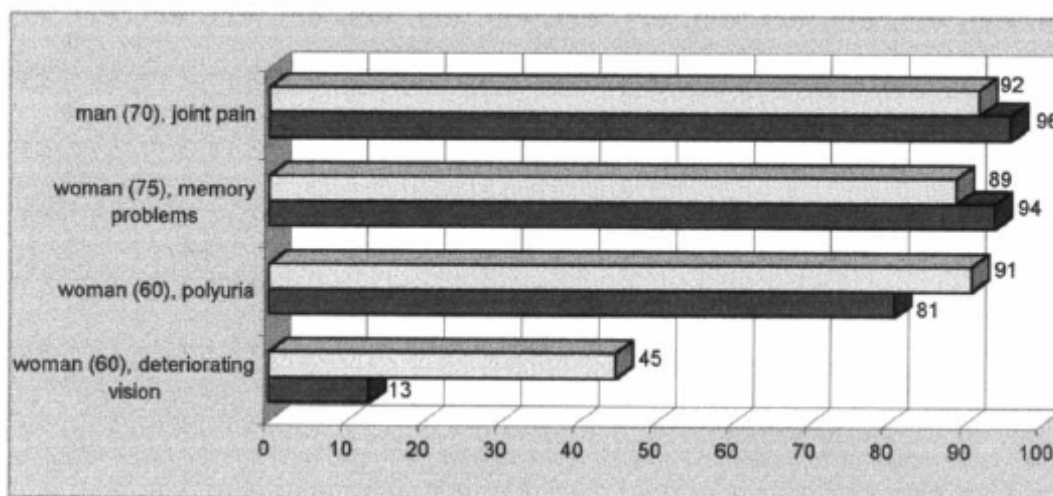
### B. Women's problems



### C. Acute problems



#### D. Problems of the elderly



#### E. Psychosocial problems

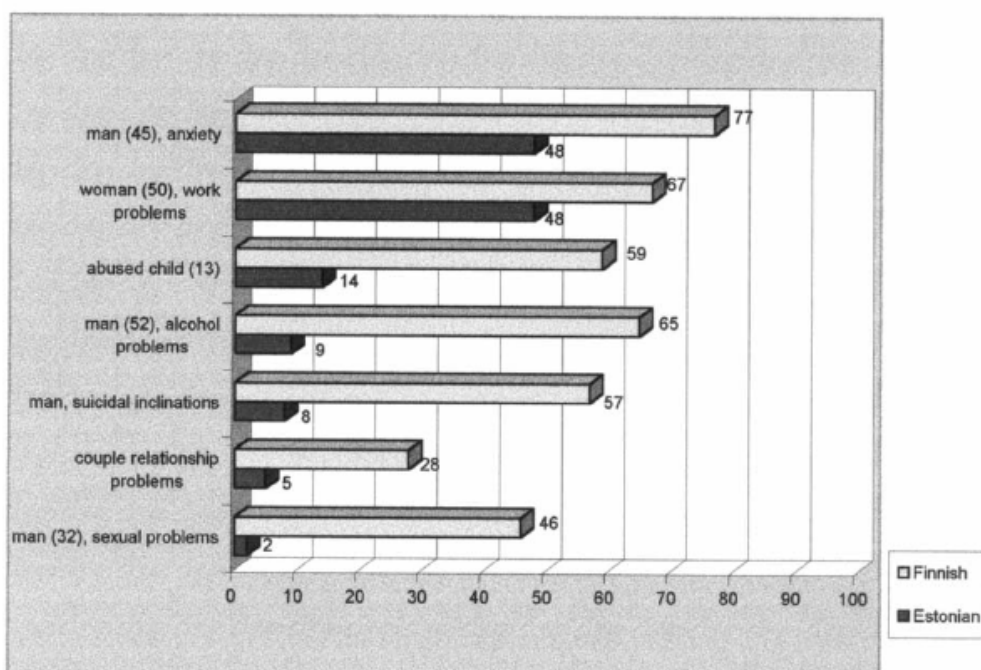


Fig. 2. Percentage of doctors reporting to act as the first contact doctor for their patients in the following problems.