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Home Visits in Croatian Family Practice: A Longitudinal Study: 1995–2012

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A B S T R A C T

Similar to other countries, home visits in Croatia are within the scope of family medicine (FM). The significant changes have been implemented within the FM with almost no scientific evaluation. The study was undertaken with the main aim to determine the overall trends in home visiting in Croatian FM between 1995 and 2012. A data sources were Croatian Health Service Yearbooks, 1995–2012. The numbers of family doctors, practice visits and home visits were collected. Results indicate that the annual number of home visits is relatively small, whether it is viewed per patient (0.1) or per doctor (160) with a decreased trend. The geographical variations are observed too. It seems that HC reforms did not have any influence on the observed trends. This should seriously be taken into the consideration in the future planning on the ways to keep growing hospital expenses under control.

Key words*: home visits, family practice, health care reforms, Croatia*

Introduction

Treatment of patients in their homes is a fundamental feature of family medicine (FM), which differentiates it from other primary health care (PHC) and hospital services. Home visits and home care are terms that are commonly used together, because it is difficult to distinguish between the first visit after the patient's invitation due to acute illnesses and home care planned for the treatment and follow-up of chronic patients, which is usually planned and includes visiting nurses and specialized home care nurses[1]. Besides the main goal of providing care for the patient in his/her familiar and social environment, reduction of the cost of hospitalizations, which is always and everywhere the most expensive part of the health care system, is an important purpose of home visits and home care nurses[1,2].

In European countries, home visits are usually within the scope of FM, but are organized and financed in different ways, therefore the number of home visits varies considerably. For example, 5% of all contacts between GPs and patients in Switzerland are accounted for by home visits, unlike Belgium, where it amounts to 50%[3]. Home visits and home care in Croatia has always been the responsibility of a family doctor (FD), who were, until 1993, employed within the health centers as district doctors responsible for the population of a given area. Besides the monthly salary, they were rewarded for home visits in accordance with the number of the visits performed. According to Šućur, in 1985, the number of home visits per GP per day varied from 0.45 in the Osijek area to 1.72 in Zagreb City[3]. The research of Orešković and associates published in 1997, showed a rapid decline in the number of home visits after 1990. In 1990, there were 543,759 home visits and only 222,228 in 1994[4].

Since then there has been no systematic research of home visits. At the same time, significant changes, known as the health care (HC) reforms, have been implemented in the organization, functioning and financing of the overall primary health care, including FM. The Health Care and Health Insurance Act in 1991 introduced the right of free choice of doctor[5]. If they wanted, the patients even could choose a FD in the remote area of the town or in another village. It was also allowed by the Act, to establish, on a private base, a Home Care service, usually led by a nurse[6].

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The second HC reform was some kind of privatization of PHC[7]. As well as other PHC doctors, FDs became private, with the obligation to individually contract with the Croatian Health Insurance Fund (CHIF). By the contracts, they were obliged to carry out HC within the scope of FM in accordance with the established standards and for the patients who selected them; that is, patients on their lists. Contractual FDs, who were given the obligation to employ nurses and auxiliary staffs and the right to manage the funds resulting from the contractual relationship, have become a sort of private entrepreneurs. However, some GPs are still employees of Health Centers, but with the same contractual rights and obligations as a contracting FD. FDs under the CHIF contract were reimbursed with age-adjusted capitation fees related to the number of patients on their lists. Home visits were not separately paid; they were included in the capitation fee[8]. From 2013, the home visits of FDs are separately paid under the diagnostic-therapeutic procedures[9].

According to the Croatian Standards and norms of the basic rights for publicly insured persons from 2006, each patient had a right to a home visit or treatment every four years, or 0.25 per year[10]. By the standard from 2008, the obligations of visiting nurses significantly increased to one visit per month for each patient requiring home care[11].

There has been no research of the home visiting of FDs until now, especially those related to the HC reforms. Therefore, the study was undertaken with the following main aims: 1) to determine the overall trends in home visiting in Croatian FM between 1995 and 2012; and 2) to estimate if there are possible relations between the HC reforms and trends in home visits.

Materials and Methods

The study is observational and longitudinal, based on routinely collected data. Primary data sources were Croatian Health Service Yearbooks, issued by the Croatian Institute of Public Health, from 1995 to 2012, containing data pertaining to the activity of FM[12]. Data used are the number of FDs, number of patients who visited FM practices and the number of home visits for a period from 1995 to 2012, overall for Croatia and for the individual counties. The average number of home visits per patient who were visited by FM practice were calculated, as well as per FD for each observed year, overall for Croatia and for individual counties.

The collected data were analyzed using the Microsoft Office Package (Excel and Access). Results are presented graphically in the form of line diagrams of absolute and average numbers, and trends are displayed as line charts.

Results

The results were presented in two parts, first the number of home visits in Croatia, then in the counties. While the number of patients who were visited by FM practice in Croatia in the period surveyed counted in the millions, the number of home visits varied from 318,150 in 1996 when it was lowest to 427,316 in 2004 when it was highest.

There was a rising trend in the number of home visits from 1996 to 2004, and after 2004 the number of home visits has been on the decline (Figure 1).

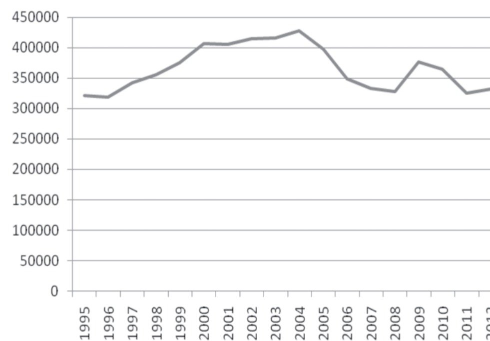

Fig. 1. Trends in the total number of home visits in Croatia, 1995–2012.

For every patient who was visited by FM practice, an average of 0.1 home visits was performed annually, in the follow-up period. The trend was on the increase until 2004 and then began to decline (Figure 2).

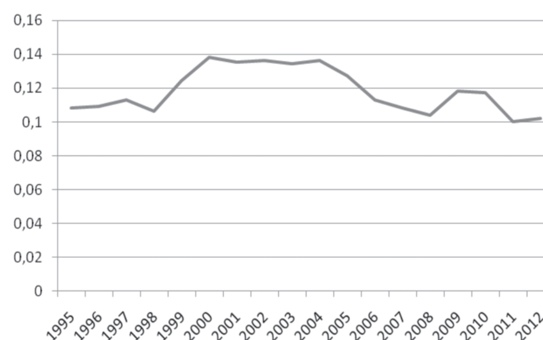

Fig. 2. Trend of the average number of home visits per patients who received care in FM in Croatia, 1995–2012.

One FD performed between 150 and 170 home visits annually, which corresponds to somewhat less than 3 visits per week (Figure 3).

Regional differences in the number of home visits were observed. They are presented by counties in Figures 4 and 5. The largest numbers of home visits per patient in 1995 and 2012 were performed in Dubrovačko-neretvanska, Karlovačka, Primorsko-goranska, Šibensko-kninska and Varaždinska Counties. In all counties, the number of home visits declined. Only in Virovitičko-podravska and Vukovarsko-srijemska, in which the number of home visits was the lowest, was an upward trend observed (Figure 4).

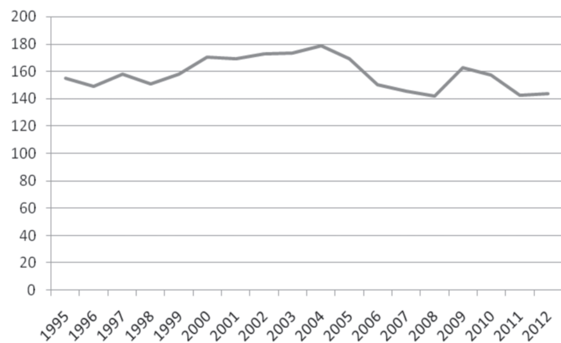

Fig. 3. Trend of the average annual number of home visits per FD in Croatia, 1995–2012.

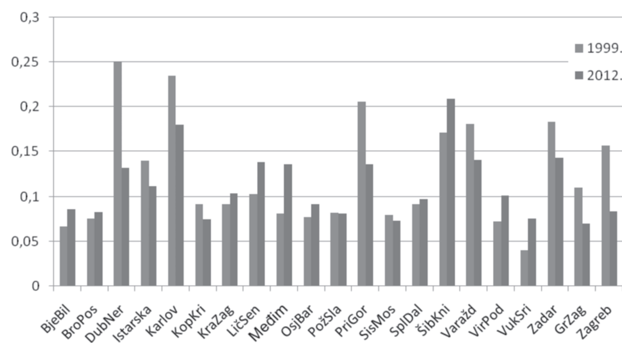

Fig. 4. Trend of the average number of home visits per patient/user in Croatia and counties in 1999 and 2012.

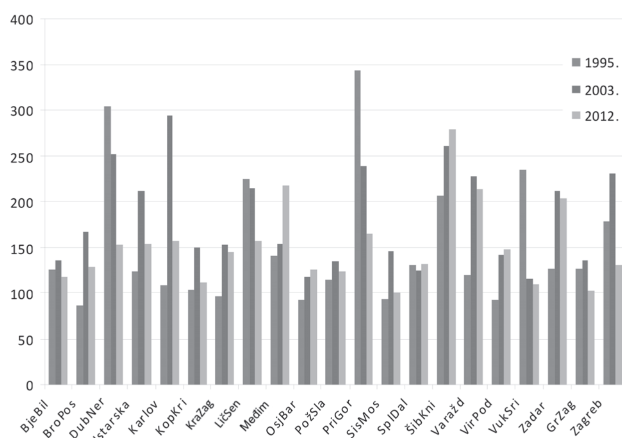

Fig. 5. Trend of the average number of home visits by FD in Croatia and Counties in 1995, 2003 and 2012.

The largest number of home visits per FDs in 1995, 2003 and 2012 was made – again – in Dubrovačko-neretvanska, Karlovačka, Primorsko-goranska, Šibensko-kninska and Varaždinska Counties, with the declining trend present in all counties except Virovitičko-podravska County (Figure 5).

Discussion

Research results indicate that the number of home visits is relatively small, whether it is viewed per patient or per FD. From 2005, the number of home visits has declined, and overall it is lower than the defined standard. In accordance with the standards, each patient is entitled to 0.25 home visits a year, and the achieved number is 0.1, which is two and a half times less. After that, the numbers rose until 2004, followed by another decline, which lasted till the end of the follow-up period. It seems that the obtained trends are not in correlation with the time-line of the introductions of the HC reforms; neither a sudden increase nor decrease is observed. Compared with the results reported by Šućur, it is five to ten times less than in 1985. For example, in Zagreb County, the annual number of home visits varied between 127 and 1018, and in this study it was around 160[3]. In comparison to the results of Oreskovic and associates, it seems that the biggest drop was recorded from 1990 to 1994[4]. They reported a total of 543,759 home visits in 1990 and 222,228 in 1994. In this study, the biggest number of visits (427,316) was observed in 2004. This could be explained by the war situation in Croatia, between 1990 and 2005. Variations by counties were observed too, and cannot be explained by the results of this study. Therefore, future researches are needed.

In Slovenia, similar results were observed; the FDs performed an average of 2.5 home visits per week[13]. In other countries, the number of home visits is significantly higher[14]. In the Netherlands, 14% of all doctor-patients contact in 1987, were home visits, with a decline in 2001 to 7–7.6%[15]. In Germany, the number of home visits per week carried out by a single GP was 6.5[16]. However, it seems that in these countries a declining trend is also present in the number of home visits[17–20].

From the literature, it is known that many factors can have an influence on home visits[18,21,22]. The main one is overload with practice work[15,23]. The workload of Croatian FDs is becoming larger; the number of patients on the list is getting more and the daily number of practice visits has gradually increased[24,25]. Being overburdened with administrative tasks despite the introduction of e-medical records, according to the complaints of doctors, could also be the reason for the small number of home visits.

The free choice of FD, which had been too broadly applied in practice, is another possible explanation. Although it has been suggested that patients should choose the nearest FD, experience shows that it is not uncommon for patients to remain on the list of previous FDs, even if they change the place of living. The availability of doctors in the countryside has also been reduced[24]. The distance from the patient's home requires the use of one's own car when performing home visits. Questions arise whether FDs have the car available and if reimbursement is sufficient to cover the cost of using their own cars. Experiences from the 70s and 80s, when official cars were available to the GP, and home visits were paid a fee for service, or special reimbursements for using private cars were applied, suggest possible solutions[3].

The introduction of home care as an independent private activity in the area of home treatment, including visiting nurses in the care of the chronically ill, are possible reasons for 'eglect' of this aspect of FD's work[26]. However, in discussions with colleagues, one gets the impression that the home visits are inadequately recorded.

The research is based on routinely collected data that can be the strength, but also a limitation. Croatian Health Service Yearbooks contain official data that are the basis for national health statistics and planning. Data are collected in a standardized manner that allows continuity of monitoring and comparability. The eighteen-year follow-up time is long enough to be able to conclude with certainty that a small number of home visits are not temporary but a permanent phenomenon. Problems were noted with data inaccuracy, which could affect individual results, but probably not on trends.

Despite the shortcomings, results of the study indicate the need for serious reflection on tackling the problems of the low number of home visits in FM. All over the world, solutions are being sought to replace costly hospital treatment with home-based treatment[27]. The growing demands of chronically ill and disabled patients and palliative care should also be taken into the considerations, as well as patients' preferences and satisfaction[28–30]. Since only trends were investigated, additional research is needed to examine the complexity of home care and treatment.

Conclusions

The results obviously indicated that the number of home visits in Croatian FM is, in comparison with the previous time and with other countries, low. Even more, the trends are slightly on the decrease during the follow-up period. It seems that HC reforms did not have any influence on the observed trends. This should seriously be taken into the consideration in the future planning on the ways to keep growing hospital expenses under control.

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JESU LI KUĆNE POSJETE I KUĆNO LIJEČENJE ZANEMARENI SADRŽAJI RADA U DJELATNOSTI OM?

S A Ž E T A K

Kao i u drugim europskim državama i u Hrvatskoj su kućne posjete (KP) u djelokrugu rada liječnika obiteljske medicine (LOM). Malobrojna istraživanja, uglavnom provedena krajem 80-tih godina, su ukazala na problem smanjenja broja KP. Budući da su uvedene mnoge promjene u sustav zdravstva, cilj istraživanja je bio ispitati trendove kretanja broja KP u periodu od 1995. do 2012. godine. Podaci su prikupljeni iz Hrvatskih zdravstveno-statističkih ljetopisa za to razdoblje. Rezultati su ukazali na činjenicu da je broj kućnih posjeta mali, prosječno 0,1 posjeta po pacijentu, ili 160 posjeta po jednom LOM godišnje, sa stalnim tredom pada nakon 2004. godine. Uočene su i razlike među županijama. Izgleda da promjene unutar zdravstvenog sustava nisu imale utjecaja na trendove. Rezultati istraživanja bi se morali ozbiljno razmotriti u planiranju učinkovitog zdravstvenog sustava u doba rastućih troškova, osobito na hospitalnu zaštitu.