Coll. Antropol. **38** (2014) Suppl. 2: 97–103
Original scientific paper

# Getting some Insight into the Home Care Nursing Service in Croatia

**Diana Kostanjšek[1], Vlatka Topolovec Nižetić[2], Željko Razum[3] and Luka Kovačić[4]**

[1] Health Centre Zagreb-East, Family Practice Njegoševa, Zagreb, Croatia
[2] Health Centre Zagreb-Centar, Family practice Utrina, Zagreb, Croatia
[3] Family Practice »Dr. Željko Razum«, Zagreb, Croatia
[4] University of Zagreb, School of Medicine, School of Public Health »Andrija Štampar«, Department of Social Medicine and Organization of Health Care, Zagreb, Croatia

**A B S T R A C T**

*Croatia, as the other Western societies are facing with the increasing share of the population over 65 years and consequently with more care-dependant people. Community living and care, including home care, is stimulating not just because of efficiency of care but also because of the peopležs preferences that home is a place of emotional and physical associations, memories and comfort. The aim of the study was to see if there is lack or surplus of Home care nursing services within the health care system. Data from the Croatian Health Insurance Fond Data base were analysed. The results of this research indicated that the number of inhabitants per one home nurse and physiotherapist contracted by the Croatian Health Insurance Fond was below the defined Standard. The average number of inhabitants per one home care nurse contracted by the CHIF for 2013 was 3373.9 compared to 3500 defined by the Standard. There was found also the huge regional differences in their distributions. The average number of contracted home physiotherapists for the same year was 9805.2 in comparison to the Standard, which was setup at the level of 15000 inhabitants per one physiotherapist.*

***Key words**: home care, home care nursing service, primary health care, Croatia*

## Introduction

The Western societies are facing with the increasing share of the population over 65 years and consequently with more care-dependant people. Diminished potentials for informal care because of changing the structure and function of the families are likely to result in the growing needs for formal care services. Many European countries aim to stimulate community living and care, including home care, not just because of potentially cost effective but also because of the people preferences that home is a place of emotional and physical associations, memories and comfort[1].

In Croatia, a professional home care has traditional been under the scope of work of family doctors (FD) teams. FDs together with public health nurses and less frequently with practice nurse were responsible for the home visits and follow-up of patients suffering from acute and chronic conditions. But, by the Health Care Act from 1993, a Home Care Nursing Service (HCNS) was introduced as separate health care institutions responsible for the provision of home care nursing and rehabilitations of the patients under the instructions and supervision of the patients' personal doctor[2]. Because the clients are mainly elderly and chronic patients, FDs teams still remain to be mostly involved. The main aim of HCNS is to keep the ill or elderly person in his/her own homes as long as possible, with the assistance of professional nurses and family members as the carers.

The HCNS is organized mostly as a private service. Only several public health institutions have organized HCNS as public services. Any health care professional with college degree and five years experience is allowed to enter into the business, either publicly financed through the contract by the Croatian Health Insurance Found (CHIF), or paid by the user's fees only. The publicly financed HCNS became a regular part of primary health service within the established National Network

Received for publication October 15, 2014

of HCNS. The Network was established for the first time in 1996 with several amendments since that year. The last amendment was in 2012[3]. Number of health personnel (nurses, physiotherapists) of the HNCS for the National Network is planned according to geographical distribution of inhabitants, geographical characteristics and local circumstances. Number of inhabitants per one nurse is set as a Standard. From 2003 it is defined as 3500 inhabitants per one nurse. According to the CHIF contract the HCNS is reimbursed for their services as fee-for-service payment model[4]. Prices of services, procedures and medical devices used at home care are determined by CHIF administration, and are reimbursed monthly[5].

The types of service are regulated by the CHIF regulations (Pravilnik), comprises the different types of medical treatment, bathing, feeding and nursing at home[6]. The initial patient's needs assessment, before the HCNS starts with the home care, is done by the personal FDs and public health nurse. Before 2010, the needs for HCNS should be approved by the CHIF's commission--doctor appointed by the CHIF[7]. Since then, the official approval by the CHIF's commission-doctor is not needed to start nursing at home, but the follow-up of the utilisation of HCNS service remained to be the responsibility of the CHIF's commission-doctor[8]. The frequency of the nurse visits is also determined by the CHIF regulation (Pravilnik), usually within a range of 2–5 times a week, during several months. Physical therapy at home is also part of the HCNS. But for this service along the recommendation from personal FD and public health nurse, the recommendation from the specialist of physical medicine is required. The Standard number of inhabitants for physical therapy at home is set by the CHIF regulation (Pravilnik) as 15,000[9,10].

The analyses of the utilization of Home Care Nursing Services until now is very insufficient, there are only few commentaries, essays and one published research article[11,12]. Therefore, this study was undertaken with the main aims to analyse the work of HCNS, to determine the trends of the development of the HCNS institutions and services, number of personnel employed and the structure of service in Croatia between 1995 and 2012.

## Methods and Materials

The study is observational and partly longitudinal, based on routinely collected data, available on the web--pages of the institutions responsible for their collection and publishing. The source of data for this research was the CHIF web-page representing the official CHIF reports. Four databases were used. The first was the Yearly report for 2002, containing the number of home care nurses having the CHIF contract[13]. The second was the List of HCNS institutions with the CHIF contract for 2010, their numbers and locations, with the number of nurses employed by those institutions[14]. The third was the List of contracting HCNS institutions in 2013, containing them same set of data like this from 2010[15]. The forth was the List of contracting outpatients specialists' service containing the data on the number and regional distribution of home physiotherapists[16].

From the obtained data it was possible to calculate the relation between the number of nurses planned by the Network and number of contracting nurses and physiotherapist, to see if there is lack or surplus of nurses within the system. Using the Mid-2010 population estimate data from the 2011 Statistical Yearbook and the 2011 population census[17], it was also possible to calculate the average number of inhabitants per one by the Network planned and one contracted home nurse and physiotherapist.

Microsoft Office package (Excel) was used in data mining. The results are presented as a table of frequencies, percentages and trends.

## Results

As it could be seen from the Table 1, the number of nurses slightly increased from 2002 to 2010, and afterwards slightly decreased until 2013 (Table 1). For the year 2002 there are no separate data for the Zagreb city and the Zagreb county. Because of this it is added a separate line in the table for both counties.

**TABLE 1**
NUMBER OF HOME CARE NURSES EMPLOYED BY THE HOME CARE NURSING SERVICE FOR THE YEARS 2002, 2010 AND 2013 FOR CROATIA AND 21 COUNTIES

| County | Year | | |
|---|---|---|---|
| | 2002 | 2010 | 2013 |
| Bjelovar-Bilogora | 28 | 39 | 38 |
| Slavonski Brod-Posavina | 41 | 52 | 50 |
| Dubrovnik-Neretva | 26 | 35 | 36 |
| Istria | 40 | 57 | 58 |
| Karlovac | 33 | 43 | 41 |
| Koprivnica-Križevci | 28 | 36 | 36 |
| Krapina-Zagorje | 30 | 41 | 42 |
| Lika-Senj | 3 | 4 | 8 |
| Međimurje | 21 | 29 | 32 |
| Osijek-Baranja | 152 | 110 | 107 |
| Požega-Slavonija | 7 | 19 | 22 |
| Primorje-Gorski Kotar | 143 | 94 | 89 |
| Sisak-Moslavina | 26 | 48 | 41 |
| Split-Dalmacija | 126 | 138 | 136 |
| Šibenik-Knin | 15 | 27 | 29 |
| Varaždin | 44 | 47 | 44 |
| Virovitica-Podravina | 64 | 28 | 28 |
| Vukovar-Sirmium | 70 | 65 | 60 |
| Zadar | 31 | 45 | 42 |
| Zagreb county | | 57 | 81 |
| City of Zagreb | | 273 | 250 |
| City of Zagreb and Zagreb county | 328 | | |
| Croatia – total | 1256 | 1287 | 1270 |

**TABLE 2**
NUMBER OF HOME CARE NURSING SERVICE INSTITUTIONS (HCNS) SITUATED IN THE TOWNS AND VILLAGES, THE NUMBER OF EMPLOYED NURSES AND THE AVERAGE NUMBER OF INHABITANTS PER ONE NURSE IN CROATIA AND COUNTIES IN 2010

| County | Number of HCNS institutions | In towns | In villages | Number of nurses | Number of inhabitants (2010 estimate) | Inhabitants / 1 nurse |
|---|---|---|---|---|---|---|
| Bjelovar-Bilogora | 8 | 8 | 0 | 39 | 123632 | 3170.1 |
| Slavonski Brod-Posavina | 11 | 5 | 6 | 52 | 171563 | 3299.3 |
| Dubrovnik-Neretva | 9 | 5 | 4 | 35 | 127746 | 3649.9 |
| Istria | 13 | 7 | 6 | 57 | 214967 | 3771.4 |
| Karlovac | 12 | 11 | 1 | 43 | 130533 | 3035.7 |
| Koprivnica-Križevci | 7 | 5 | 2 | 36 | 119000 | 3305.6 |
| Krapina-Zagorje | 15 | 2 | 13 | 41 | 135635 | 3308.2 |
| Lika-Senj | 3 | 2 | 1 | 4 | 49063 | 12265.8 |
| Međimurje | 4 | 1 | 3 | 29 | 117890 | 4065.2 |
| Osijek-Baranja | 18 | 13 | 5 | 110 | 317802 | 2889.1 |
| Požega-Slavonija | 3 | 3 | 0 | 19 | 81024 | 4264.4 |
| Primorje-Gorski Kotar | 24 | 13 | 11 | 94 | 303491 | 3228.6 |
| Sisak-Moslavina | 14 | 11 | 3 | 48 | 169419 | 3529.6 |
| Split-Dalmacija | 16 | 16 | 0 | 138 | 482604 | 3105.8 |
| Šibenik-Knin | 8 | 6 | 2 | 27 | 112927 | 4182.5 |
| Varaždin | 4 | 3 | 1 | 47 | 179895 | 3827.6 |
| Virovitica-Podravina | 5 | 4 | 1 | 28 | 86487 | 3088.8 |
| Vukovar-Sirmium | 6 | 6 | 0 | 65 | 195674 | 3010.4 |
| Zadar | 9 | 6 | 3 | 45 | 176316 | 3918.1 |
| Zagreb county | 17 | 12 | 5 | 57 | 329253 | 5776.4 |
| City of Zagreb | 21 | 21 | 0 | 273 | 792860 | 2904.2 |
| Croatia – total | 235 | 166 | 69 | 1287 | 4417781 | 3432.6 |

From the List of Home Care Nursing Service institutions (HCNS), which had the contract with the Croatian Health Insurance Found (CHIF) for 2010, the number of institutions and their locations (town or village), together with the number of nurses employed by those institutions and the average number of inhabitants per one contracting nurse were obtained and presented in the Table 2.

More then two third of the HCNS institutions contracting with CHIF in 2010 were located in towns. The share of urban population in Croatia is about 60%[18]. There are no institutions located in the villages in Bjelovar-Bilogora, Požega-Slavonija, Split-Dalmatia and Vukovar-Srijem counties. The average number of inhabitants per one home care nurse in 2010 was 3432.6. There are large regional differences: high number of inhabitants per one contracting nurse was found in the Lika-Senj county (12,265.8) and the Zagreb county (5,776.4). The smallest number of inhabitants per one contracting nurse was found in the Osijek-Baranja county (2,748.0) and the City of Zagreb (2,904.2).

From the List of HCNS institutions with the CHIF contract for 2013 the number of home nurses was compared with the number of nurses defined by the Network (planned number), and the average number of inhabitants per one planned and one contracting nurse. Data are presented in the Table 3. The number of inhabitants is taken from the 2011 population census.

The average planned number of inhabitants per one nurse in 2013 in Croatia was 3,288.5, with some regional variations, from 3,142.1 in Virovitica-Podravina county to 3,650.1 in Istria county. The average number of inhabitants per one contracting nurse was 3,373.9, with large regional differences, between 2,850.8 in Osijek-Baranja county and 6,565.9 inhabitants per one nurse in Lika-Senj county.

The total number of contracting home care nurses in Croatia was smaller (lack of 33 nurses) than it was planned. The great differences was found in in Lika-Senj (6 or 42% nurses less), Sisak-Moslavina (13 or 24% nurses less), Šibenik-Knin county (5 or 15% nurses less) Varaždin (8 or 15% nurses less), in Zadar (7 or 14% nurses less) and Zagreb county (8 or 9% nurses less). In some counties the number of contracting nurses was higher then those planned to be, in Osijek-Baranja county (12 or 11% nurses more than in the plan) and Vukovar-Sirmium county (4 or 7% nurses more than in the plan).

From the List of contracting outpatients specialists' service containing the data on the number and regional distribution of home physiotherapists with the CHIF

**TABLE 3**
PLANNED AND CONTRACTED NUMBER OF HOME CARE NURSES IN CROATIA AND COUNTIES IN 2013

| County | Planned | Contracted | Difference | Number of inhabitants (2011 population census) | Planned inhabitant / 1 nurse | Contracted inhabitant / 1 nurse |
|---|---|---|---|---|---|---|
| Bjelovar-Bilogora | 38 | 38 | 0 | 119764 | 3151.7 | 3151.7 |
| Slavonski Brod-Posavina | 51 | 50 | –1 | 158575 | 3109.3 | 3171.5 |
| Dubrovnik-Neretva | 35 | 36 | 1 | 122568 | 3502.0 | 3404.7 |
| Istria | 57 | 58 | +1 | 208055 | 3650.1 | 3587.2 |
| Karlovac | 41 | 41 | 0 | 128899 | 3143.9 | 3143.9 |
| Koprivnica-Križevci | 36 | 36 | 0 | 115584 | 3210.7 | 3210.7 |
| Krapina-Zagorje | 42 | 42 | 0 | 132892 | 3164.1 | 3164.1 |
| Lika-Senj | 14 | 8 | –6 | 50927 | 3637.6 | 6365.9 |
| Međimurje | 33 | 32 | –1 | 113804 | 3448.6 | 3556.4 |
| Osijek-Baranja | 95 | 107 | +12 | 305032 | 3210.9 | 2850.8 |
| Požega-Slavonija | 24 | 22 | –2 | 78034 | 3251.4 | 3547.0 |
| Primorje-Gorski Kotar | 89 | 89 | 0 | 296195 | 3328.0 | 3328.0 |
| Sisak-Moslavina | 54 | 41 | –13 | 172439 | 3193.3 | 4205.8 |
| Split-Dalmacija | 137 | 136 | –1 | 454798 | 3319.7 | 3344.1 |
| Šibenik-Knin | 34 | 29 | –5 | 109375 | 3216.9 | 3771.6 |
| Varaždin | 52 | 44 | –8 | 175951 | 3383.7 | 3998.9 |
| Virovitica-Podravina | 27 | 28 | +1 | 84836 | 3142.1 | 3029.9 |
| Vukovar-Sirmium | 56 | 60 | +4 | 179521 | 3205.7 | 2992.0 |
| Zadar | 49 | 42 | –7 | 170017 | 3469.7 | 4048.0 |
| Zagreb county | 89 | 81 | –8 | 317606 | 3568.6 | 3921.1 |
| City of Zagreb | 250 | 250 | 0 | 790017 | 3160.1 | 3160.1 |
| Croatia – total | 1303 | 1270 | –33 | 4284889 | 3288.5 | 3373.9 |

contract for 2013, the average number of inhabitants per one planned and one contracting nurse were obtained for Croatia and counties and presented in the Table 4.

In 2013 the average number of inhabitants per one physiotherapist with the CHIF contract in Croatia was 9,805.2, with great regional differences. The higher number of inhabitants per one physiotherapist was found in Sisak-Moslavina county (28,739.8 inhabitants per one physiotherapist), Bjelovar-Bilogora county (17,109.1) and Lika-Senj county (16,975.7). Smaller number of inhabitants per one physiotherapist was found in the City of Zagreb and Zagreb county (6,153.5) and Primorje-Gorski Kotar county (6,371.7). The standard ratio was set up as 1 physiotherapist per 15,000 inhabitants.

Data for the expenditure for the primary care, including those for HCNS, was obtained from the CHIF annual Reports and is presented in the Table 5.

Around 4.7% of CHIF primary care expenditure was spent on home care service, particularly around 110 000 Kunas annually per one home service nurse.

## Discussion

Obtained results indicate that the attention should be paid on several aspects of Home Care Nursing Service (HCNS) in Croatia. Firstly, the data collection and reporting systems within the National Institute of Public Health Croatia published in the Health-Service Yearbooks, as an official national statistics data base, and the Croatian Health Insurance Fund (CHIF), as a contractor and financier of the service, should be coordinated and improved, because it was found great differences between these two data sources. For this analysis data from CHIF was mostly used. Secondly, a planned number of home care nurses in relation to the number of inhabitants are below the number defined by the Standard. 3,500 inhabitants per one nurse are defined by the Standard, but in 2013 the average number of Croatian inhabitants per one home care nurse is planned to be 3,288.5. Thirdly, the number of inhabitants per one nurse contracting with CHIF in 2010 and 2013 was higher than planned. The average number of inhabitants per one nurse for 2010 in Croatia was 3,432.6 and 3,373.9 for 2013. But, great regional variations were found, between 2850.8 in Osijek-Baranja county and 6,365.9 inhabitants per nurse in Lika-Senj county. Fourthly, the similar situation was found within the home physiotherapy service, much less inhabitants per one home physiotherapist than defined by the Standard. A Standard number should be 15,000 inhabitants per one physiotherapist, but it was

**TABLE 4**
THE AVERAGE NUMBER OF INHABITANTS PER ONE HOME PHYSIOTHERAPIST WITH CHIF CONTRACT IN CROATIA AND COUNTIES, IN 2013

| | No of contracted physiotherapists in 2013 | No of inhabitants (2011 population census) | Inhabitants / 1 physiotherapist |
|---|---|---|---|
| Bjelovar-Bilogora | 7 | 119764 | 17109.1 |
| Slavonski Brod-Posavina | 14 | 158575 | 11326.8 |
| Dubrovnik-Neretva | 9 | 122568 | 13618.7 |
| Istria | 14 | 208055 | 14861.1 |
| Karlovac | 12 | 128899 | 10741.6 |
| Koprivnica-Križevci | 8 | 115584 | 14448.0 |
| Krapina-Zagorje | 8 | 132892 | 16611.5 |
| Lika-Senj | 3 | 50927 | 16975.7 |
| Međimurje | 8 | 113804 | 14225.5 |
| Osijek-Baranja | 27 | 305032 | 11297.5 |
| Požega-Slavonija | 5 | 78034 | 15606.8 |
| Primorje-Gorski Kotar | 44 | 296195 | 6731.7 |
| Sisak-Moslavina | 6 | 172439 | 28739.8 |
| Split-Dalmacija | 43 | 454798 | 10576.7 |
| Šibenik-Knin | 7 | 109375 | 15625.0 |
| Varaždin | 12 | 175951 | 14662.6 |
| Virovitica-Podravina | 7 | 84836 | 12119.4 |
| Vukovar-Sirmium | 12 | 179521 | 14960.1 |
| Zadar | 11 | 170017 | 15456.1 |
| Zagreb county | n.a. | 790017 | n.a. |
| City of Zagreb | n.a. | 317606 | n.a. |
| City of Zagreb and Zagreb county | 180 | 1107623 | 6153.5 |
| Croatia – total | 437 | 4284889 | 9805.2 |

Note: n.a. – not applicable (there are not separate data for the Zagreb county and the City of Zagreb

**TABLE 5**
THE CHIF EXPENDITURES (IN KUNAS) FOR PRIMARY CARE AND FOR THE HOME CARE SERVICE IN CROATIA, FROM 2008 TO 2013

| Year | Total PC expenditures | HCNS expenditures | Number of HCNS nurses | Expenditures per 1 HCNS nurse |
|---|---|---|---|---|
| 2008 | 2938817558 | 141433769 | n.a. | n.a. |
| 2009 | 3318021277 | 148851501 | n.a. | n.a. |
| 2010 | 2949911575 | 139324188 | 1287 | 108255.0 |
| 2011 | 2917738592 | 141519301 | n.a. | n.a. |
| 2012 | 2969982492 | 139818317 | 1270 | 110093.2 |

Note: n.a. – not available

found 9,805.2 inhabitants per one physiotherapist contracted for 2013. Again, great regional variations were found, with 28739.8 inhabitants per one physiotherapist in Sisak-Moslavina county and 6,731.7 for the City of Zagreb and Zagreb county. Fifth, the majority of HCNS institutions which are responsible for the provision of home care nursing service and home physiotherapy were located in the towns. Sixth, around 4.7% the primary health care expenditure are devoted to the HCNS, which means around 110,000 Kunas per one nurse annually.

It is not ease to comment why it is planned and contracted number of nurses for the Home Care Nursing Service above the standard number (3500 inhabitants per one home care nurse or 15 000 inhabitants per one home physiotherapist). It is not possible to assess is it optimal or not because the patients' health need assessment and standard setting procedures are not done and not published. But, it should be taken into the consideration that one public health nurse is responsible, as a standard, for 5100 inhabitants. Also, it is not clear why it

was contracted in some counties, such as Osijek-Baranja for the HCNS and the City of Zagreb for the home physiotherapists, a higher number of those services than it was planned by the Network.

Županić and colleagues investigated the health care needs and satisfaction of the users and the most often applied nursing procedures. They found out that the users were mostly older then 70-years, after cerebrovascullar insult, needed enhanced medical care and were satisfied with home nursing service[19]. In their assay on home care in Croatia, Guldesi and Benković also pointed out some challenges, such as the organization and financial aspects, disparities in the access and questionable effectiveness of the service[20]. In his personal view, Prpić pointed out a problems rising up from the legal status of the institutions as private entrepreneurs, being on free market with non-loyal concurrence and financial difficulties with CHIF as only payer on one side and without any controlling mechanisms on another side. He also pointed out the role of patients as users not having possibilities to freely choose the providers, institution and nurse[11]. Problems with lack of precise regulations, lack of professional protocols necessary for the provision of the high quality home nursing care and under payment were also recognised by the Croatian Nursing Chamber, as it was reported by the Poslovni dnevnik[12].

It is even harder to make an international comparison because of the differences in policy and regulation of the service, financing and organisation, and the health care delivery[21]. For example, in UK, Norway and Sweden, HCNS is integrated within family medicine, and according to the research results, it is connected with lower morbidity and less of hospitalisation and pharmaceutical ussage[22]. In Denmark and Finland, the financing is decentralised on local governments and the role of social institutions are much greater then health care institutions[23,24]. In Germany HCNS is mainly organised through social institutions and financed by the local government and by the service users[25]. In the Netherlands the home care service is integrated with family medicine, and besides financing by local governments the patients share plays an important role[26]. In majority of the countries, the nurses are the most frequent providers, but social workers, paramedics and volunteers also participate, especially in Sweden, UK and Denmark[21]. The researches from Canada indicate that the home care models should be strongly evaluated from the point of effectiveness and patients' satisfactions[27,28]. It seams that integrated models, which include the patients personal doctors' teams exhibit the better results[29].

This research is the first attempt to get inside in the organisational structure of the HCNS. Unfortunately, because of anreable data presented by the Croatian Health Service Yearbook it was not possible to get deeper inside in the home nursing scope of work, the number and the kind of interventions. Data obtained from the CHIF on which the results were based, should be taken as realiable, because they are part of the official reports. Some of obtained data, such as the higher number of nurses or home physiotherapist contracted with the CHIF than those defined by the Standard, should be taken in account. But the results might not still be used for the official planning, because the research is small in scale. It should be more used to motivate further researches to pay more attention to the very important part of health care services, such as home care. Even more, Croatian population is getting older and the needs for such type of services will be growing and the health care resources will always be scarce.

## Conclusions

The results of this research indicated that the number of inhabitants per one home nurse and physiotherapist was below the defined Standard. 3,500 inhabitants per one nurse is defined by the Standard, but the average number of inhabitants per one home care nurse contracted by the CHIF for 2013 was 3,373.9 with huge regional differences in their distributions. The average number of contracted home physiotherapists for the same year was 9,805.2 in comparison with the Standard, which was setup at the level of 15,000 inhabitants per one physiotherapist. Because this research is only superficial inside into the problem of the home nursing care in Croatia further researches are needed to bring the answers on these very important part of the Croatian health care system.

## Acknowledgements

This study was supported by the Foundation for the Development of Family Medicine in Croatia and WHO Collaborating Centre for Primary Health Care, School of Public Health »Andrija Štampar«, School of Medicine, University of Zagreb.

## REFERENCES

1. WHO EUROPE, Publications-Home care in Europe: The solid facts, accessed 14.5.2014. Available from: URL: www.euro.who.in/en/.../home-care-in-europe-the-solid-facts. — 2. MINISTARSTVO ZDRAVSTVA I SOCIJALNE SKRBI, Zakon o zdravstvenoj zaštiti, Narodne novine, 75 (1993). — 3. MINISTARSTVO ZDRAVLJA, Mreža javne zdravstvene službe, Narodne novine, 101 (2012). — 4.HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Pravilnik o standardima i normativima prava na zdravstvenu zaštitu iz osnovnog zdravstvenog osiguranja za 2003. godinu, Narodne novine, 2 (2003). — 5. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Odluka o osnovama za sklapanje ugovora sa zdravstvenim ustanovama i privatnim zdravstvenim radnicima za razdoblje od 1. travnja do 31. prosinca 2004. godine, Narodne novine, 54 (2004). — 6. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Pravilnik o izmjeni Pravilnika o uvjetima i načinu ostvarivanja prava iz obveznog zdravstvenog osiguranja na zdravstvenu njegu u kući osigurane osobe, Narodne novine, 38 (2013). — 7. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Pravilnik o uvjetima i načinu ostvarivanja prava iz osnovnog zdravstvenog osiguranja za provođenje zdravstvene njege u kući, Narodne novine, 76 (2002). — 8. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Pravilnik o uvjetima i

načinu ostvarivanja prava iz obveznog zdravstvenog osiguranja na zdravstvenu njegu u kući osigurane osobe, Narodne novine, 88 (2010). — 9. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Pravilnik o standardima i normativima prava na zdravstvenu zaštitu iz osnovnog zdravstvenog osiguranja za razdoblje od 1. srpnja do 31. prosinca 2002. godine, Narodne novine, 70 (2002). — 10. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Pravilnik o standardima i normativima prava na zdravstvenu zaštitu iz osnovnoga zdravstvenog osiguranja za 2005. godinu, Narodne novine 188 (2004). — 11. PRPIĆ D, Glasnik pulske bolnice, 2 (2005) 33. — 12. CRNJAK M, Upitan opstanak ustanova za zdravstvenu njegu u kući, Poslovni dnevnik, accessed 13.2.2014. Available from: URL: http://www.poslovni.hr/hrvatska/upitan-opstanak-ustanova-za-zdravstvenu-njegu-u-kući. — 13. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Godišnje izvješće za 2002, accessed 13.2.2014. Available from: URL: hzzo/godišnje_izvjese_2002. — 14. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Popis ugovorenih zdravstvenih njega u RH u 2010, accessed 13.2.2014. Available from: URL: www_popis_ugovorenih_zdravstvenih_njega_u_RH_u_ 2010. — 15. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Popis ugovorenih zdravstvenih njega u RH u 2013, accessed 13.2.2014. Available from: URL: www_popis_ugovorenih_zdravstvenih_njega_u_ RH_u_ 2013. — 16. HRVATSKI ZAVOD ZA ZDRAVSTVENO OSIGURANJE, Popis ugovorenih sadržaja izvanbolničkog SKZ 1.7.2013, accessed 13. 2.2014. Available from: URL: www_popis_ugovorenih_sadrzaja_izvan bolnickog_SKZ_1.7.2013. — 17. DRŽAVNI ZAVOD ZA STATISTIKU, Statistički ljetopis 2011. Procjena stanovništva sredinom 2010. prema dobnim skupinama, spolu i županijama, Zagreb. Avaible from: www.dzs.hr. — 18. DEFILIPIS J, Sociologija i prostor, 43 (2005) 823. — 19. ŽUPANIĆ M, KOVAČEVIĆ I, KRIŠKIĆ V, ŽUPANIĆ S, Periodicum biologorum, 115 (2013) 575. — 20. GULDCSI L, BENKOVIĆ V, Home care accross Europe, Case studies: Croatia, In: GENED N, BOERMA W, KRONEMAN M, HUTCHINSON A, SALTMAN RB (eds), Home care accross Europe, Case studies, Nivel, European Observatory on Health System and polyces, accessed 15.4.2014. Available from: www.nivel.nl/en/home-care. — 21. GENET N, BOERMA WGW, KRINGOS DS, BOUMAN A, FRANCKE AL, FAGERSTROM C, MELCHIORRE MG, GRECO C. DEVILLE W, BMC Health Serv Research, 11 (2001) 207. DOI: 10.1186/1472-6963-11-207. — 22. ALLDRED DP, RAYNOR DK, HUGHES C, BARBER N, CHEN TF, SPOOR P, The Cochrane Library. DOI: 10. 1002/14651858.CD009095. — 23. HAMMAR T, RISSANEN P, PERÄLÄ ML. European Journal of Ageing, 5 (2008) 147. DOI: 10.1007/s10433-008-0078-4. — 24. STUART M, WEINRICH M, The Gerontologist, 41 (2001) 474. DOI: 10.1093/geront/41.4.474. — 25. LE BIHAN B, CLAUDE MARTIN C, Social Policy & Administration, 40 (2006) 26. DOI: 10.1111/j.1467-9515.2006.00475.x. — 26. ALGERA M, FRANCKE AL, KERKSTRA A, VAN DER ZEE J, Health & Social Care in the Community, 11 (2003) 232. — 27. NOWACZYNSKI M, SINHA SK, Can Fam Physician, 59 (2013) 237. — 28. STALL N, NOWACZYNSKI M, SINHA SK, Can Fam Physician, 59 (2013) 243. — 29. STEWART M, SANGSTER JF, RYAN BL, HOCH JS. COHEN I, MCWILLIAM CL, MITCHEL J, VINGLILIS E, TYRELLY C, MCWHINNEY IR, Can Fam Physician, 56 (2010) 1166.

*D. Kostanjšek*

*Health Centre Zagreb-East, Family Practice, Njegoševa 10, 10000 Zagreb, Croatia*
*e-mail: dianakostanjsek@gmail.com*

## ANALIZA KUĆNE NJEGA U HRVATSKOJ

## S A Ž E T A K

Hrvatska kao i druge zapadnoeuropska društva susreću se s rastućim udjelom populacije stare 65 i više godina i konsekventno tome sa sve više osoba ovisnih o tuđoj pomoći. Život u zajednici, uključujući i zdravstvenu skrb, stimulira se ne samo zbog povećanja djelotvornosti službe nego i zbog toga jer je dom mjesto koje ljudi preferiraju zbog emocionalne i fizičke veze, sjećanja i komfora. Cilj studije je bio utvrditi postoji li višak ili manjak sestara i fizioterapeuta u kućnoj njezi u zdravstvenom sustavu. Korišteni su podaci iz baze podataka Hrvatskog zavoda za zdravstveno osiguranje. Rezultati studije ukazuju da je broj stanovnika ugovoren u odnosu na jednu sestru i fizioterapeuta od strane Hrvatskog zavoda za zdravstveno osiguranje bio ispod usvojenog standard. Prosječan broj stanovnika ogovoren za 2013. godinu bio je 3373,9 za 1 sestru u odnosu na standard koji je iznosio 3500. Nađene su velike regionalne razlike. Prosječni broj stanovnika ugovoren za jednog fizioterapeuta bio je 9805,2 u odnosu na standard, koji je iznosio 15000 stanovnika.