

A Role of Croatian Family Doctors in the Provision of Women's Health Care: A Study Based on Routinely Collected Data

Miro Benčić¹, Renata Pavlov² and Mladenka Vrcić Keglević³

¹ Health Centre of the Zagreb-County, Family Practice Brdovec, Zaprešić, Croatia

² Family Practice »Dr. Renata Pavlov«, Zagreb, Croatia

³ Foundation for the Development of Family Medicine in Croatia, Zagreb, Croatia

ABSTRACT

The aim of this study was to investigate how often Croatian FDs are involved in the provision of women's health, having in mind that women's health is primarily organized by the gynecological service. Only the data related to women's health were collected from the Croatian health statistical yearbooks from 1995 to 2012, in which ICD X was used. Results showed that total number of diagnoses are increasing. The greatest increase is observed in the category named as other diseases of female organs, then diagnoses related to the pregnancy, delivery and postpartum and malignant diseases, especially, breast cancer. Contrary, number of menopausal disorders continuing decreased. Diagnoses related to family planning (Z30) are relative small in amount and stabile. Results indicated that policy makers should take in account readiness of FDs to be involved in the provision of women's health.

Key words: family medicine, women health care, primary health care, gynecological service, Croatia

Introduction

A provision of primary health care (PHC) in Croatia is organized, mainly by family doctors (FD), and also by primary pediatricians and gynecologists for the women aged 15 years and older¹. But, besides this organizational structure, FDs are often involved in the provision of women's health, because the women ask them for a help or because the women's problem is just a part of more comprehensive health problems². In previous time, especially before 1980-th, FD were very much involved in the provision of women's health, especially in the family planning^{3,4}.

Even today, by the official document such as, the Plan and Program of Health Care Delivery, FD are recognized as important providers of women's health, especially in the field of prevention⁵. It is stated, that they are responsible for the health education, namely promotion of the responsible sexual behavior, family planning as well as the prevention and early detections of malignant diseases, mainly breast cancer. Besides, FDs are responsible for the home visits and home care irrespectable of the

health problems, including women; gynecologist are not involved in home care at all⁵.

But, a reality is quite different. According to the general opinions, including women's, only gynecologist are perceived as the competent for the provision of women care. Furthermore, some documents from the Croatian Health Insurance Found (CHIF), as a contractor and the payer for the health care provision, set down certain limitations to the FD involvement in the women's health⁶. As far as we have known, there is no published literature to bring the light at the role of Croatian FD in the women's health. Therefore, we undertook this small scale study with the main aim to determine the morbidity trends related to the women health and registered in FM, in period 1995–2012.

Materials and Methods

The study was observational and retrospective, based on the routinely collected, national statistics data from

the Croatian Health Service Yearbooks, from 1995 to 2012⁷. Data from the yearbooks were based on the family practice reports from all over Croatia; until 2008 these were in paper form, and since then through electronic medical records. The data were reported to the Croatian Institute of Public Health, as a central bureau, in line with the Instructions for data registration and reporting⁸. Following the Instructions, only the first visit of a patient suffering from a chronic condition in a calendar year is registered as a morbidity case. If a patient suffers from an acute disease, only the first visit is registered as a morbidity case. All subsequent, follow-up visits are not registered as morbidity. This will continue until the disease is cured, and if the patient feels well the case will be closed. If the same patient returns in the consecutive year, for the same acute diagnosis, it is registered as a new morbidity case. Since 1995, the International Disease Classification, version X, (ICD-X) is used to register morbidity. However, not all diagnoses are reported within the yearbooks; they are presented in their main groups, from A to Z groups, and within the groups, are divided into several categories.

For the purposes of this research, the data were collected exactly in the way they were presented in the yearbooks and for sequential years. The number of diagnosis of the ICD-X classification sub-groups were collected, only for the diagnoses specific for female gender, such as: a) malignant disease of female organs (C50, breast cancer and C53, cervical cancer); b) other diseases of female organs (registered as N undefined), postmenopausal disorders (N 95); c) pregnancy, delivery and puerperium (O00–O99); d) family planning (registered under Z30).

The epidemiological descriptive observational method used in the study was free from artificial manipulation of the study data (factors)⁹. The collected data were analyzed using Microsoft Office (Excel) software. The results are presented in the form of frequency, and the trends are displayed graphically as line charts.

Results

The total number of diagnoses related to the women's health and registered in the FM from 1995 to 2007 shows a stable trend. Since 2008 total numbers of diagnosis increased. The total number of diagnoses registered in 1995 was 147 829 and 213 628 in 2012. The increase is mainly caused by the increase in the number of diagnoses named as others diseases of female organs (N undefined). Their percentage increased from 46% in 1995 to 59.9% in 2012. The next most commonly reported diagnoses were those related to pregnancy, delivery and puerperium (O00–O99). The number increased from 40,179 registered in 1995 to 51,125 diagnoses registered in 2012. The same situation is also with the diagnoses of malignant disease (C50 and C53). Only the number of menopausal disorders show continuous decline, and in 2012 only 1.9% of diagnoses were related to menopausal disorders. The number of diagnoses associated with family planning (Z30) was permanently low with steadily decline (Figure 1).

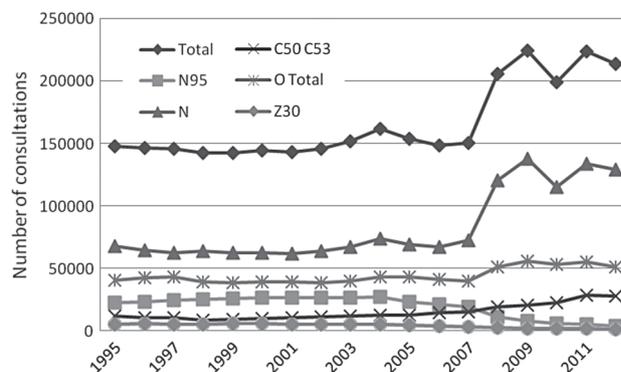


Fig. 1. Number of diagnoses related to the women's health registered at Croatian Family Practice, 1995–2012.

Until 2004, the number of diagnoses of menopausal disorders (N95) was in a slight increase; in 2004 it was registered 26,967 diagnoses. Afterward, a decline started; only 4,108 diagnoses were registered in 2012 (Figure 2).

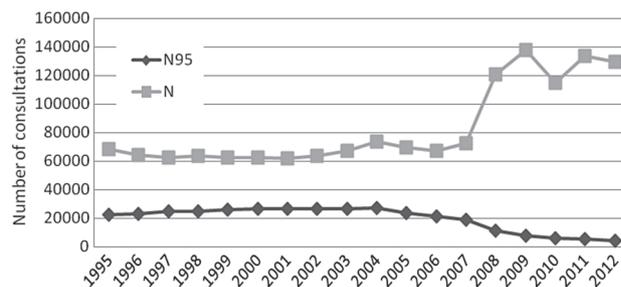


Fig. 2. Number of menopausal disorders (N95) registered at Croatian Family Medicine, 1995–2012.

The total number of diagnoses related to pregnancy, delivery and puerperium were relatively stable until 2008 and afterwards they increased. It is mostly caused by the increase in diagnoses labeled as others, which includes: hypertension in pregnancy, edema, vomiting, bleeding in early pregnancy, venous diseases, urinary tract infection, diabetes mellitus, excessive weight gain, multiple pregnancy, other infections in postpartum, breast disorders and lactation etc. In 1995, there were 25,357 registered diagnoses, and in 2011, when it was the peak, it was registered 42,107 diagnoses.

Since 2005, the number of diagnoses associated with delivery (O80–O84) decreased from 14,641 in 2005 to 8,379 diagnoses registered in 2012. The number of diagnoses associated with abortion (O00–O08) also shows a downward trend, from 5,603 diagnoses registered in 1995 to 3,510 diagnoses in 2012 (Figure 3).

There has been continuous upward trend in the number of diagnoses of breast cancer since 1998. The number increased from 6,697 in 1998 to 26,539 diagnoses registered in 2012. Particularly significant increase was observed since 2006. The number of cervical cancer diagnoses was always low, with a trend of continuous decline, from 2,692 diagnoses in 1995 to 1,287 diagnoses registered in 2012 (Figure 4).

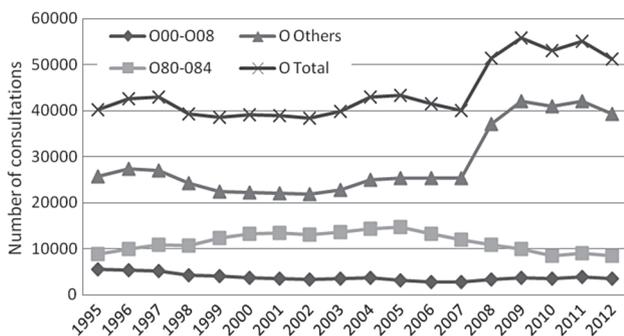


Fig. 3. Number of diagnosis related to pregnancy, delivery and puerperium(O00-O99) registered at Croatian Family Practice, 1995–2012.

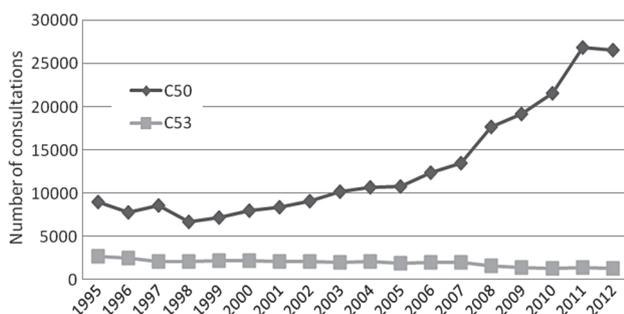


Fig. 4. Number of breast (C50) and cervical (C53) cancer registered at Croatian Family Practice, 1995–2012.

The number of diagnoses related to the family planning (Z30) was always low, with the trend of continuous decline, from 5,530 diagnoses in 1995 to 1,243 diagnoses registered in 2012 (Figure 5).

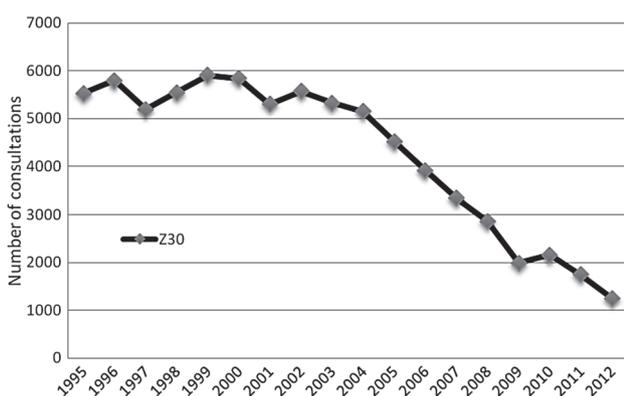


Fig. 5. Number of diagnoses related to the family planning (Z30) registered at Croatian Family Practice, 1995–2012.

Discussion

The obtained results indicate that FDs in Croatia are also involved in the provision of women's health. A total number of diagnoses related to the women's health registered in FM are increasing during the 18-years of follow up, especially after the year 2008. The greatest increase

is observed in the category named as other diseases of female organs, then diagnoses related to the pregnancy, delivery and postpartum and malignant diseases, especially, breast cancer. Contrary, number of menopausal disorders continuing to decreased. Diagnoses related to family planning (Z30) are relative small in amount and stable.

Although, the women's health in Croatia is traditionally connected with the gynecologists, results of the FD role are not surprising. It seems that FDs as the first choice and the first point of care is still present in Croatia². Besides, symptoms and signs of the illnesses are often very vague to direct a patient to the »right« doctor and patients choose the most available one. Soler and Okes commented that symptom diagnoses are inherent to FDs, because they very often deal with health problems at the earliest stage of development, at high level of diagnostic uncertainty¹⁰.

Another reason of obtained results might lay in difficulties to access the gynecologists service. The research done by Topolovec-Nižetić and colleagues has shown, that around 100 gynecologist are missing in Croatia. The number of women per one gynecologist is far away from the Standard, and practices witnessing a great number of daily visits. Besides, a high percentage of women do not have chosen gynecologist. Altogether indicate that primary gynecological service is not easily available to the women¹¹. But, what are the real implications of such organizational structure on women's health should be investigated as well as women's needs and attitudes¹².

Increased trend in the number of diagnoses registered by FDs could also be explained by the introduction of informatization in FM in the year 2008 and consecutively a better registration. In fact, results show that total number of diagnoses related to the women's health especially increased after the year 2008. Furthermore, increased numbers of diagnoses related to the pregnancy, delivery and postpartum were obviously in connection with the CHIF regulation. By the regulations, only FDs were responsible to provide sick-leave certificate, even those indicated by gynecologists and many pregnant women in Croatia are on a sick-leave¹³.

It is likely that increased trend in number of breast cancer is connected with the introduction of mammographic screening, because the program at national level was introduced in 2006 and the trend started to increase rapidly exactly at that time¹⁴. There is usually no gynecological equipment in FM, therefore women having cervical cancers are rare seen; they are usually in the gynecological care¹⁵. The number of women's with menopausal problems decreasing, which could mean that FDs are aware of limited indications for hormone replacement therapy¹⁶. Small number of diagnoses related to family planning is not unexpected, because contraceptive use in Croatia is not on a high level^{17,18}.

It is not easy to make comparison of the obtained results with those from other countries, because of different organization of primary health care. A survey done in 28 EU countries, show that only Slovenia, Slovakia and

Check Republic have the system similar to Croatia with the gynecologists in primary care. FD and gynecologist are equally involved in women health in 22 EU countries. In UK and Ireland, FD are the only ones responsible for the provision of women health care¹⁹. Many studies from different European countries, USA, Canada and Australia, also reported on the important role of FD in different aspect of women's health²⁰⁻²⁶.

This small scale study is based on the national statistics data, usually used for the national and international planning, therefore the obtained results could be easily comparable with those from another country implying the ICD-10 revision classification. The morbidity data were collected in the same manner during the entire follow up period allowing to investigating the time-trends. The observed morbidity trends should not be mismatched with the morbidity in theoretic sense. They mainly represent reasons of FM accouter and utilization. Although the obtained data allow determining trends, there are not enough sufficient for deeper analysis of the role of the FD in women health. Therefore, additional researches are needed and possible, especially if we take in account that patient's e-medical files are easy available.

Despite limitations, the study results might be helpful to policy-makers in future health delivery planning. Besides the existing Croatian model, there are other models for service delivery, such as those based of the woman's

right to choose any primary care physician, including FD, who know them better than others, and who can provide longitudinal and comprehensive health care^{27,28}. As it enters the EU, Croatia is facing a range of challenges in harmonizing with other countries, and the issue of reproductive and female health will become even more important²⁹.

Conclusions

The results on morbidity registered in the Croatian FM indicated that FDs are also involved in the provision of women's health, in spite of the existing organizational structure based on primary gynecologists. Although this study shows the increase of morbidity diagnosis in the last 18 years related women's health, FDs are still neglected in the provision of such care. The study is small in scale, therefore additional research are needed to determine the role of FD in the women's health.

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M. Benčić

Health Centre of the Zagreb-County, Family Practice Brdovec, Pavla Beluhana 3, 10290 Zaprešić, Croatia
e-mail: miro.bencic@zg.t-com.hr

ULOGA LIJEČNIKA OBITELJSKE MEDICINE U ZAŠTITI ZDRAVLJA ŽENA U HRVATSKOJ: LONGITUDINALNA STUDIJA UTEMELJENA NA RUTINSKI PRIKUPLJENIM PODACIMA

S A Ž E T A K

Zdravstvenu zaštitu žena na primarnoj razini provode u Hrvatskoj ginekolozi. Cilj ovog istraživanja bio je istražiti koliko su liječnici obiteljske medicine (LOM) uključeni u probleme vezane za zdravlje žena. Prikupljeni su podaci iz Hrvatskih zdravstveno-statističkih ljetopisa u periodu od 1995. do 2012. godine u kojima je korištena MKB X. Prikupljeni su samo podaci o morbiditetu bolesti ženskih spolnih organa. Rezultati pokazuju da se povećava ukupan broj dijagnoza vezanih za zdravlje žena u ordinacijama obiteljske medicine, osobito nakon 2008. godine, najviše na račun ostalih bolesti ženskih spolnih organa, zatim zbog stanja vezanih uz trudnoću i zbog karcinoma dojke. Također postoji trend pada broja dijagnoza povezanih uz poremećaje u menopauzi. Rutinski prikupljeni podaci su pokazali da su LOM svakodnevno uključeni u pružanje skrbi za zdravlje žena, iako je ta njihova uloga još uvijek zapostavljena. Stoga bi spremnost obiteljskih liječnika da se uključe u rješavanje kompleksnih problema vezanih za zdravlje žena trebalo uzeti u obzir pri planiranju primarne zdravstvene zaštite.