

# Trends in Family Planning and Contraception Carried out in Primary Health Care in Croatia: 1995–2012: Study Based on Routinely Collected Data

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## ABSTRACT

*The lack of objective findings provided the reason to undertake this study with the main aim of exploring the trends in family planning and contraception carried out in primary health care in Croatia. Based on the Croatian health statistical yearbooks from 1995 to 2012, data were collected on the number and structure of visits and the number and type of prescribed contraceptives by public and private gynecological practices, and visits to family practices and school medicine services. The results showed that only a small number of fertile women received primary care for family planning issues, trends that are evident through the entire follow-up period. A trend of »migration« from the public to the private sector is also observed. Family doctors and school medicine are almost entirely excluded from the provision of family planning despite the magnitude of the family planning problem resulting in a waste of human and material resources.*

**Key words:** primary health care, family planning, contraception, gynecology, family medicine, Croatia

## Introduction

Primary health care (PHC) for women in Croatia is traditionally carried out by gynecologists. Dispensaries for women were established at the beginning of the 1950s as the organizational unit of health centers, responsible for the curative and preventive care of women in the local community. In 1996, PHC services including gynecologists were privatized, and they became individual contractors with the Croatian Health Insurance Fund (CHIF)<sup>1</sup>. Gynecologists are obligated to carry out health care for the women on their lists within the scope defined by the Plan and program of health care measures, a Croatian standard for the health care service provision<sup>2</sup>. All women over the age of fifteen have the right to choose a gynecologist and join their chosen gynecologist's list. A certain number of gynecologists continued to work at health centers as employees, but with identical contractual responsibilities toward the CHIF. Both groups of gy-

necologists were available for women with public health insurance; therefore, they are referred to in this paper as »public gynecologists«. In addition to this group of gynecologists with the contract, alternative gynecologists provide gynecological services on a completely private basis. The Health Care Act of 1993 enabled the opening of private practices, of which some gynecologists took advantage<sup>3</sup>. The patients are charged directly, independently of whether they are state health insured or not. In this paper, these gynecologists are referred to as »private gynecologists«.

Until 1980, family doctors (FDs) were very much involved in the provision of women's services<sup>4</sup>. They continue to be involved, especially in family planning, but to a lesser extent than previously. Until 1998, school medicine doctors were also involved, but since then, the

school medicine service has become a part of public health, organizationally separated from PHC. The workplaces are schools, and they usually provide different types of health promotion and education including counselling for family planning.

It is well known that family planning using contraceptives greatly improves the health of modern woman and her unborn child<sup>5,6</sup>. For a long time in Croatia, a small number of research on contraception were published; thus, it is difficult to know the prevalence and methods of contraception for a long term. Of the available reports by the United Nations on the use of contraception, Croatia is mentioned only in the 2009 report using data from the 1970s<sup>5</sup>. According to Puls Agency, about 43% of women did not use any method of contraception in 2006, which decreased to 35% in 2010<sup>6</sup>. The number of boxes of oral contraceptives sold significantly dropped in 2007; for example, more than 250,000 boxes of Jasmine were sold in 2007, and only 90,000 boxes in 2011<sup>7</sup>. Research conducted by Benčić, in 2010, on a sample of 283 women from Zaprešić and the surrounding areas showed that only 44.2% of women use contraceptives<sup>8</sup>.

The lack of objective indicators led us to explore the trends of family planning activities performed in PHC between 1995 and 2012.

### Materials and Methods

The study is observational and longitudinal, based on routinely collected data detailed in Croatian Health Service Yearbooks, which were issued by the Croatian National Institute of Public Health from 1995 to 2012<sup>9</sup>. The data were collected in the manner they were presented in the yearbooks for family medicine FM, gynecological and school medicine services<sup>10</sup>. The number of first visits, total visits, and total visits by age were collected, as well as the number and types of contraceptives prescribed by public gynecologists. The same data were collected for private gynecologists. The number of women at fertile age was collected from the same source and the percentage of women using contraception from both services (public and private gynecologists) was calculated.

The number of family planning visits in FM, in public gynecological and school medicine services, registered according to the International Classification of Disease – X revision (ICD-X) as Z30, was also collected. The percentage of fertile women was calculated in relation to the total number of Z30 visits in those services. Additionally, the number of visits to the family planning counsellor, provided as part of the school medicine service, was collected.

The collected data were analysed using Microsoft Office (Excel and Access). The results are presented in the form of tables of frequency and graphically, and trends are displayed as line charts.

### Results

The results are presented in three parts. The first part presents the results of family planning activities provided by the gynecologists (public and private). The second part presents Z30 visits to FM and public gynecologists, and the third part presents the family planning activities performed by the school medicine service.

#### Family planning performed by gynecologists

Between 1995 and 2006, the number of first visits for family planning and the number of total visits increased, followed by a decline up to 2012. 36.8% of all visits were first visits. The largest proportion of visits was for women aged 20–29 (45.8% in 2002, and 42.3% in 2011). A small number of visits were women under 19, and very few were adolescents under the age of 16 (Figure 1).

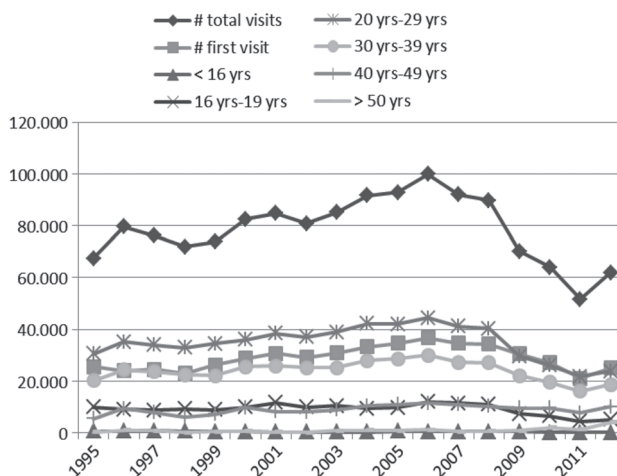


Fig. 1. Trends in family planning activities by public gynecologists in Croatia, 1995–2012: The number of first visits, total visits, and total visits by age.

The number of first visits and the total number of visits to private gynecologists were relatively stable until 2009, when they increased sharply until 2011. A larger

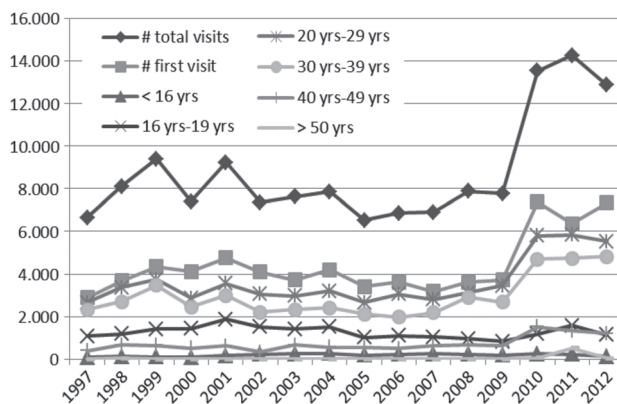


Fig. 2. Trends in family planning activities by private gynecologists in Croatia, 1995–2012: The number of first visits, total visits, and total visits by age.

proportion was first visits, 55.8% in 2002 and 44.7% in 2011. The highest proportion was women aged 20–29, 41.6% (Figure 2).

Generally, the most prescribed method of contraception was oral contraceptives, with an increasing trend until 2007; thereafter, the trend declined until 2011. Around 36% belongs to other contraceptive methods and with stable trend during entire period. The trends in overall prescription slightly decline over the entire period (Figure 3).

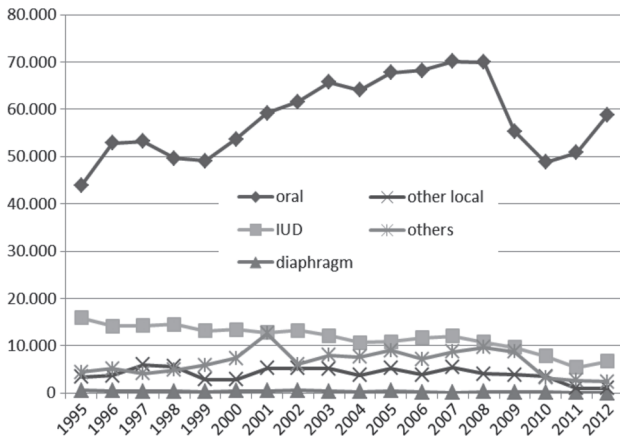


Fig. 3. Trend in the number and types of contraceptive methods prescribed by public gynecologists in Croatia, 1995–2012.

Oral contraceptives were also the most prescribed method by private gynecologists, with a stable trend until 2005, followed by an increase of 2.1 times by 2012. The prescription of other contraceptive methods showed a steady trend over the period (Figure 4).

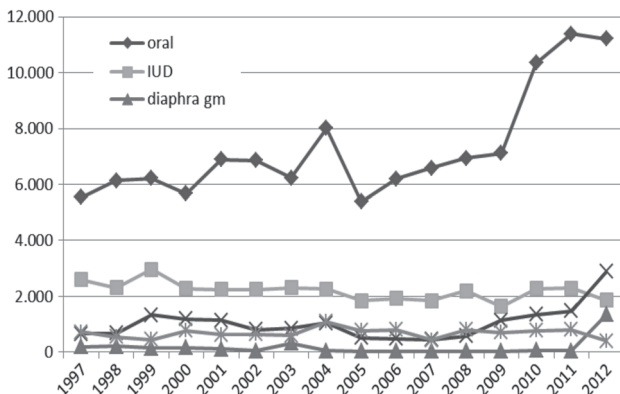


Fig. 4. Trend in the number and types of prescribed contraceptives prescribed by private gynecologists in Croatia, 1995–2012.

Around 3.5% of fertile women visited public and private gynecologists for family planning reasons during the entire period. A slight increase was observed until 2006, decreasing thereafter (Figure 5).

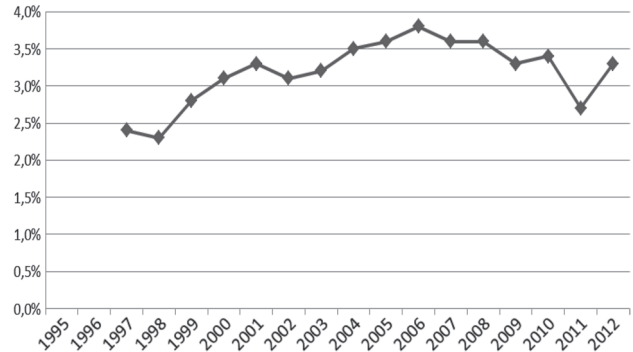


Fig. 5. Trend in the percentage of fertile women who visited gynecologists (public and private) for family planning reasons in Croatia, 1995–2012.

### Family planning visits, Z30 visits, recorded in family medicine and public gynecology

The number of Z30 visits recorded at public gynecologists rose until 2006, and declined thereafter, with a sudden increase in the year 2010. The trend of Z30 visits recorded in FM continuously declined over the period (Figure 6).

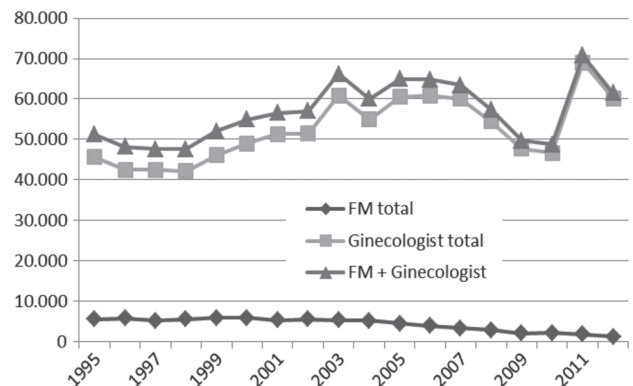


Fig. 6. Trend in the number of family planning visits, Z30 visits recorded in FM and public gynecology in Croatia, 1995–2012.

Only about 6% of women of fertile age visited their FDs and public gynecologists for family planning reasons. The trend was relatively stable until 2010, after which it increased in 2% (Figure 7).

### Family planning issues in school medicine

The number of Z30 visits recorded in the school medicine service, which was registered until 1997, was only between 2000 and 3000. After that time, registered visits were no longer available. Registration of visits for reproductive health counselling started in 2006. The number of visits was also small, with a sharp downward trend after 2009 (Figure 8).

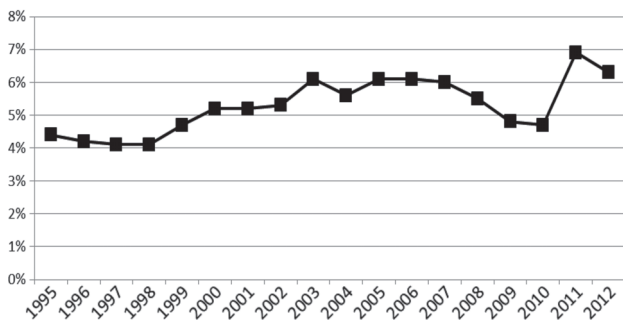


Fig. 7. Trend in the percentage of fertile women Z30 visits recorded in family medicine practices and public gynecologists in Croatia, 1995–2012.

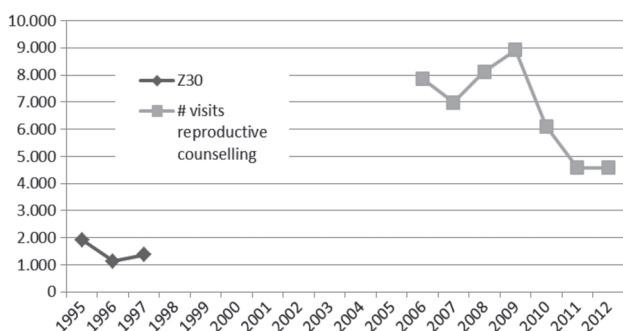


Fig. 8. Trend in the number of family planning visits, Z30 visits recorded in the school.

## Discussion

The research results show that gynecologists usually deliver family planning and contraception, which is expected in the Croatian organizational structure of PHC. However, unexpectedly, the number of visits and prescribed contraceptives declined sharply in the public gynecology service and increased dramatically in the private service, especially after 2009, presenting a mirror image. Although FDs are, by the legislations, almost excluded from providing women’s health care, they continue to participate, albeit with a very small proportion of women and with a decreasing trend. Becoming only a preventive service, school medicine has almost completely stopped providing individual family planning activities, which is a cause for concern.

This research has value because it is based on data recorded as a mandatory part of health statistics of Croatia, which allows comparisons to be made with similar databases. Furthermore, as the data have been recorded over eighteen years, the period is sufficient to indicate that the observed trends are not a current, but rather a long-term, phenomenon that requires specific attention, offering value from a longitudinal perspective. However, the data source has some limitations. Routinely collected data does not encompass elements required for deeper understanding of the issue of family planning and contraception. For example, the routinely collected data does

not cover the use of widely used contraceptive methods such as condoms, diaphragms and spermicidal agents<sup>11</sup>. In addition, fluctuations in collected data also indicate that care should be taken when making precise conclusions.

However, regardless of the restrictions, it is clear that family planning in Croatia warrants more attention. Only about 6% of women of fertile age were recorded to have made family planning visits (Z30 visits) to FM and public gynecology, while only 3.5% of fertile women, in both public and private gynecology services, used mostly safe methods of contraception such as oral contraceptives and intrauterine device, which is significantly less than European countries. According to the results of a study conducted in France, Italy, Germany, Spain and the UK, 77% of women use contraception, specifically, the pill (30%) and condoms (20%). Permanent methods, such as the intrauterine device, implants, injectable hormonal preparations, are used by 11% of women; similarly, 11% are sterilised. Despite the differences between countries, the pill is the most commonly used form of contraception in France, a permanent method of contraception is mostly used in Germany. In Italy and Spain, countries that are cultural and religious like Croatia, the majority of couples use condoms, but also a large number of women do not use any method of contraception (30%)<sup>12</sup>. In Slovenia, more than 65% of women used contraception at the end of 1990s, with approximately 35% opting to use the pill<sup>13</sup>. The situation in Serbia is similar to the findings of this study, about 41% of women use contraception, but only 18% use reliable methods<sup>14</sup>. In the United Nation’s reports, the trend of using contraception is stable only in those countries where the rates are high (70–80%), such as the countries of North Europe. It grows in all other European countries, particularly those with levels of economic development similar to Croatia<sup>5</sup>. According to the results of this study, the situation in Croatia is not promising. Perhaps the lack of accessibility of public gynecologists, reported by Topolovec-Nizetic and associates, is one of the many reasons for the under usage of contraception in Croatia<sup>15</sup>.

However, it is likely that contraception use in Croatia is greater than that indicated in the study results, because the data of the methods of contraception without medical supervision were not recorded<sup>8, 11</sup>. Some women likely used a permanent prescription to purchase oral contraceptives; therefore, negating the need to contact their doctor. Many women likely realize their contraceptive needs through general check-ups organized mostly by enterprises, which is common in Croatia. Furthermore, the issue of contraception should be understood from a much broader aspect, such as attitudes and life-values. During the last two decades, Croatian society has become more traditional<sup>16–18</sup>, making attitudes towards contraception traditional, even among younger people<sup>19</sup>; thus, natural methods of contraception have become more acceptable<sup>8</sup>. However, from a public health viewpoint and the family planning is obviously a public health problem, the change in trends from the public to

the private sector pose a serious problem for women in times of economic crisis. In addition, it is also an irrational use of resources, as money is spent once for the obligatory health insurance, and a second time, to pay for a private service.

Besides the limitations, the research results should be considered from the viewpoint of different stakeholders, including the whole society. To raise the general awareness that family planning is a systematic investment in the health of women and unborn children, and one way to address the demographic crisis<sup>20</sup>. Secondly, organizational changes should be introduced to the health care system that would allow all patients free choice of any PHC physicians. To allow the FD and school medicine doctors to be engaged in the provision of these activities, thus ensuring a greater, territorial and temporal availability to the population of fertile women, especially for the most vulnerable part of the population, schoolchildren and adolescents. In addition, empowering the public service would negate the need for a private service. Since women themselves cover the cost of contraceptives, it would be worth considering putting contraceptives on the list of prescriptions reimbursed by the CHIF. Registration of products not currently available in Croatia, particularly those with long-term effects, which are present in many countries, should also be considered<sup>21</sup>. Putting some contraceptives on the list of OTC drugs would also be worthy of consideration<sup>22</sup>. Since this study was descriptive and it was not intended to enter into causal relations in the issues of family planning, the results do

not provide all the necessary answers. Therefore, future research is needed, which according to the literature, should take into account all complexities of the issue of family planning, the specificity of Croatian situation and the possible consequences on the health of the population<sup>23–28</sup>.

## Conclusion

The results clearly indicate that only a small number of fertile women received primary care for family planning issues. In particular, the percentage of women who use safe contraceptive methods is small. Such trends are evident throughout the entire follow-up period. The trend of »migration« from the public to private service was observed. Parts of PHC, such as family doctors and school medicine, have almost entirely been excluded from providing the necessary care, which is a huge waste of human and material resources when considering the magnitude of the problem that would be solved with the continued provision of such services.

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## **TRENDOVI KRETANJA AKTIVNOSTI PLANIRANJA OBITELJI I KONTRACENCIJE U PRIMARNOJ ZDRAVSTVENOJ ZAŠTITI U HRVATSKOJ, 1995.–2012.: STUDIJA UTEMELJENA NA RUTINSKI PRIKUPLJENIM PODACIMA**

### **S A Ž E T A K**

Cilj je bio istražiti trendove kretanja aktivnosti usmjerene na planiranje obitelji i kontracepciju u primarnoj zdravstvenoj zaštiti (PZZ) u Hrvatskoj u periodu od 1995. do 2012. godine. Na temelju Hrvatskih zdravstveno-statističkih ljetopisa, prikupljeni su podaci o broju i struktura posjeta po dobi, o broju i vrsti propisanih kontracepcijskih sredstava u ginekološkim ordinacijama s ugovorom s Hrvatskim zavodom za zdravstveno osiguranje i privatnim; te podaci o posjetama u obiteljskoj i školskoj medicini (Z30). Rezultati su pokazali da je mali broj žena fertile dobi obuhvaćen aktivnostima planiranja obitelji. Osobito je mali postotak žena koje primjenjuju sigurne metode kontracepcije. Trendovi su prisutni kroz svih osmanest godina. Uočen je i trend »seljenja« aktivnosti iz »javnog« u privatni sektor. Djelovi PZZ kao što su obiteljska i školska medicina su skoro isključena iz provođenja ovih aktivnosti, što predstavlja gubitak ljudskih i materijalnih resursa kada se uzme u obzir veličina problema.