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ANALYSIS OF THE DEMOGRAPHIC PHENOMENON OF FERTILITY IN ROMANIA FROM 1950-2021

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Keywords: fertility, fertility in Romania, fertility evolution, fertility rate, births **Abstract:** Fertility is the ability of two cells, the egg and the sperm, to unite in order to conceive a biological child. The aim of this study is to analyse how the fertility rate has evolved demographically since the communist period and until now in Romania. In order to carry out this study, we analysed the data provided by Macrotrends regarding the fertility rate in Romania from the last 71 years (more precisely 1950-2021). The results of the study indicate that, in 1950 Romania had an average fertility rate of 3.25 children per woman. It gradually declined until 1965. In 1967, the number of births doubled to almost half a million new-borns in just 1 year. Such a rate has never been reached, the fertility rate being in a continuous decline until now.

INTRODUCTION

Fertility is the ability of two cells, the egg and the sperm, to unite to conceive a biological child.(1)

Fertility rate (total fertility rate) is the average number of children a woman gives birth to during the breeding years. In order to remain a stable population, from a certain area, a total fertility rate of 2.1 is needed, in the context in which no kind of immigration or emigration should take place.(2) The fertility rate increase occurs when the fertility rate approaches 2 children per woman.(2)

A study conducted in 1996 showed that education is not directly related to the total fertility rate, but nevertheless is strongly correlated with the percentage of married couples who use contraceptive methods.(3) Which means that education has an important indirect relationship with the total fertility rate.

Globally, the average fertility rate is below 2.5 children per woman. And also globally, the data indicate that in the last 50 years, the fertility rate has decreased considerably, halving.(2)

One of the factors that led to the reduction of the fertility rate is the modernization of societies, which has led to a reduction in the number of children per woman.(2,4)

At the level of all European states, fertility rates have dropped considerably, which could have extremely negative effects on European economies.(5)

In the post-war period, of rural collectivization, but also of industrialization, Romania had to deal with fertility decreases, like the nations of Eastern and Central Europe.

Therefore, the communists in Romania saw this decline as a demographic threat to the country.(6)

During the communism period the total fertility rate was 1.9 children per woman (in 1966) at 3.7 (in 1967) and 3.6 (in 1968).(7,8) Thus, Ceauşescu managed in Romania to bring a general increase in fertility in the period 1967-1989, through the prism of control in public and private life.(6)

Also, another factor that led to reduced fertility after

1990 is the use of certain modern contraceptive methods that have proven to be very effective and have helped people reducing unwanted pregnancies.(9,10)

In the case of less educated women, they experienced a high increase in fertility after the implementation of the policies and a higher fertility, but they began to decrease after the lifting of restrictions.(11)

On the other hand, in developing countries, fertility has decreased as a result of access to education, as well as to labour market opportunities, but also as a result of the development of technology on the pregnancy control side (12) and due to migration.(6)

AIM

The aim of this study is to analyse how the fertility rate has evolved demographically, as well as the fertility growth rate from the communist period to present in Romania.

MATERIALS AND METHODS

In order to carry out this study we will analyse the data provided by Macrotrends regarding the fertility rate, as well as the fertility growth rate in Romania.(13)

We chose to analyse this database provided by Macrotrends, as they provided data from the beginning of communism in Romania until now.

Therefore, we set out to analyse the last 71 years (more precisely 1950-2021) in Romania.

Through this study we aim to present the evolution over time of the fertility rate in Romania, as well as the fertility growth rate. Then, also based on the analysis performed in SPSS, we aim to make predictions about its evolution over the next 71 years.

RESULTS

Based on the data provided by Macrotrends, we have created the graphic no. 1 "fertility rate in Romania in the period

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1950-2021" and chart no. 2 "fertility growth rate in Romania during 1950-2021".

The analyses were performed in the SPSS version 26 program.

Figure no. 1. Fertility rate in Romania in the period 1950-2021

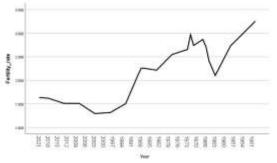


Figure no. 1 shows that the highest fertility rate in 1950 was 3.25 children per woman. The lowest fertility rate during the communist period was in 1963, at 2.1 per woman. After the fall of communism, the fertility rate was steadily declining.

Figure no. 2. Fertility growth rate in Romania during 1950-2021

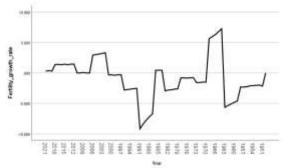


Figure no. 2 emphasizes that the highest fertility growth rate was 7.27% in 1964. Between 1965-1968, the growth rates varied between 6.78% and 5.64%, being in continuous decline. The lowest growth rate was in 1993, at -9.17%. Currently, in 2021, the growth rate is 0.31% decreasing compared to 2020 (0.37%).

DISCUSSIONS

According to the results obtained, in 1950 Romania had an average fertility rate of 3.25 children per woman. It gradually declined until 1965.

In 1965 the number of induced abortions had reached the value of 1,115,000, a record compared to 1959, more precisely being double, compared to 1959.(14)

In 1966, Ceauşescu banned abortions, making them illegal by decree 770. Thus, both contraceptive methods, sex education and human reproduction textbooks were banned.(15)

Thus, in 1967, decree 940 appeared, which aimed at increasing the birth rate. Practically, Ceauşescu proposed that by this decree every woman who gives birth to 10 children be called "Heroine Mother", following to receive land, money and cereals.(16)

So, in just one year, the number of births has doubled to almost half a million new-borns.(17)

The dictator's goal was to grow Romania in order to catch up with progress and civilization. Because of this major objective of the dictator, between 1966 and 1989, thousands of women died because of clandestine or self-inflicted abortions.

However, in reality, there may have been several women who died, this cannot be known exactly because the communist regime hid this, and in medical records the cause of women's deaths was recorded as sepsis or kidney failure.(6)

However, since 1973, the number of births has been declining, the total fertility rate being 2.65 children born on average to a woman, which was not at all to the liking of the dictator.

Thus, after the extermination of Ceauşescu, in December 1989, on December 26, decree 770 issued by the government led by Ion Iliescu was cancelled.(18) Thus, after 23 years (1966-1989), women became free in terms of making decisions to give birth to children. Only there was a problem, namely that 1 million women (out of a total of 5.2 million women able to give birth) were sterile due to miscarriages caused by precarious conditions.(19)

Romania's birth rate has dropped significantly since 1990. And it has continued to decline to this day. This is exactly the opposite of the surplus of children after the Second World War. Since then, the Romanian state did not intervene in the decisions regarding the birth rate until 2016. Thus, the first negative record was reached in 2011 when 196,242 children were born, which meant a negative record for Romania.

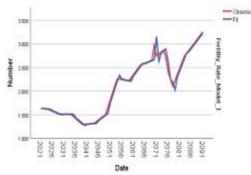
Then, in 2012, the Romanian state adopted a law encouraging women to receive 1-year parental leave, with an allowance of 85% of annual income.(20)

But the peak was reached in 2016 when 190,238 children were born, which again meant a negative record for Romania.(21) In 2020, the country's population had 19.07 million inhabitants and has been in a continuous demographic decline.(22) In 2020, the number of births in Romania was 178,000 children, being the lowest number of births from 1930 to date.(23) The reasons for which the country's demographics are constantly declining are primarily related to the low standard of living in Romania as opposed to the West, so more and more Romanians choose to leave the country to escape poverty.(24)

Moreover, we talk about the lack of facilities in hospitals (25), the lack of nurseries and kindergartens (26), economic and political instability (27), couple problems (28), health problems including infertility (29,30), daily worries and lack of psychological support.(31) All this contributes to a drastic decrease in the birth rate.

However, currently, women receive counselling from the church before they make the decision to have an abortion (32), and there are even hospitals that refuse to have abortions.(33) Based on the analysis in SPSS, we set out to make predictions about the evolution of fertility over the next 70 years (more precisely 2021-2091).

Figure no. 3. Predictions regarding the evolution of fertility 2021-2091



From figure no. 3 "Predictions on the evolution of fertility 2021-2091", we note that the fertility rate will continue to decline significantly until 2050, and in 2051 the fertility rate

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will increase until 2071. Basically, the peak of growth will be reached in 2071. Afterwards, it will start to decrease again until 2080, and will increase again until 2091.

There are a number of factors that can contribute to increased fertility, including reduced postpartum abstinence, reduced sterility due to treatment for sexually transmitted diseases, resumption of ovulation and postpartum menstruation due to decreased breastfeeding, and reduced loss of women's reproductive performance.(34)

It is necessary for the fertility rate to increase, as the population decreases with age, which means that the level of productivity decreases. In addition, the costs of health care, social care and pensions are increasing, leading to devastating effects on the economy.(5)

On the other hand, there are studies that contradict the need to increase the fertility rate, as uncontrolled population growth leads to a reduction in living standards worldwide and thus to the depletion of natural resources.(35)

However, low fertility is a problem for society, as it helps to prevent prosperity in both the medium and long term.(36)

The fertility policies that could be proposed are primarily related to reproductive health policy, family support, but also policies related to the employment side to be family friendly (5), but also by encouraging the increase of fertility in women, respectively in men.(30)

For example, at the level of all European countries there are certain systems of monthly family allowances, offered in cash to parents which are offered according to the number of children in the family.(5) The same system could be practiced in Romania.

CONCLUSIONS

The purpose of this study was to analyse how the fertility rate has evolved demographically from the communist period to the present.

In order to carry out this study, we analysed the data provided by Macrotrends regarding the fertility rate in Romania in the last 71 years (1950-2021), in which we found the following:

The highest fertility rate in 1950 was 3.25 children per woman. The lowest fertility rate during the communist period was in 1963, at 2.1 per woman. After the fall of communism, the fertility rate was steadily declining.

The highest growth rate of fertility was 7.27% in 1964. Between 1965-1968, growth rates ranged from 6.78% to 5.64%, and continued to decline. The lowest growth rate was in 1993, at -9.17%. Currently, in 2021, the growth rate was 0.31%, decreasing compared to 2020 (0.37%).

The regime led by Ceauşescu was one of the harshest regimes in Romania, which violated the rights and freedoms of the person.

As the number of children increased, so did the centres for the institutionalization of children. However, the communist regime treated this with indifference.

Providing incentives does not seem to be a long-term sustainable measure. As incentives can encourage couples to give birth earlier, but this does not mean that it will lead to an increase in the number of children.

We, therefore, find that with women's freedom to decide how many children to have (women's empowerment), economic, social and technological changes have led to a low fertility rate.

However, most abortions are performed among adolescents, so that Romania is in 2^{nd} place, while Bulgaria is in first place among abortions performed by adolescents.

Also, the fact that, today, the emphasis is on children's

education, the costs are much higher than in the past. Thus, parents have to make a decision about the number of children they can support, as their financial resources are limited.

The causes that led to decreased fertility in Romania are modernization, urbanization, industrialization, old age at marriage, but also methods of contraception, sterilization, and abortion.

Then we made predictions about the evolution of fertility over the next 71 years in which we noticed that: the fertility rate will continue to decline significantly in 2021-2050, and in 2051 the fertility rate will increase until 2071. Basically, the peak of growth will be reached in 2071. Afterwards, it will start to decrease again until 2080, and will increase again until 2091.

Regarding the future research directions, we aim to analyse the level of fertility at the level of macro-regions, in order to show the disparities between them both at urban and rural level.

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