



ANALYSIS OF BIRTHS AT THE SIBIU COUNTY CLINICAL EMERGENCY HOSPITAL BETWEEN 2017 AND 2022

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Abstract: Births are important occasions that many people consider sacred, because it ensures the survival and evolution of the human species. The purpose of this study is to analyse the evolution of births at the County Clinical Hospital in Sibiu during 2017-2022. Regarding the realization of this study, we analysed the data provided by the County Clinical Hospital in Sibiu during the period 2017-2022 regarding the age, environment, hospitalization, main diagnosis, secondary diagnosis, condition at discharge and procedure. In the top of the diagnosis, at admission, in 2017-2021 there was the supervision of a high-risk, non-specific risk. In the top of the main diagnoses is the unique birth by caesarean section, followed by the supervision of an increased, non-specific risk. In the top of the secondary diagnoses in the period 2017-2021 there was the unique spontaneous birth followed by anaemia that complicates the pregnancy, birth and the confinement.

INTRODUCTION

Births are important occasions that many people consider sacred, because it ensures the survival and evolution of the human species.(1)

When a pregnant woman has health problems that could endanger the life of the fetus, the health of the fetus or both, the pregnancy is considered to be in danger.(2)

Doctors need to be able to provide women with effective communication, control and early detection to develop the best treatment plans and reduce the risks for the mother and/or fetus.(2)

It is a fact of our century that the older population in the world extends rapidly, especially due to the increase in life and concomitant decrease in fertility in the previous century.(3)

According to the Romanian Institute of Statistics 2019, on January 1, 2018, 19,530.6 thousand people lived in Romania, of whom 10.0 million (51.1%) were women. The resident population of the country decreased by 291.6 thousand between July 1, 2015 and January 1, 2018, due to the negative effects of natural growth and the balance of international migration.(4)

The age distribution of the resident population reflects the specific effects of a demographic aging process, which is primarily characterized by a decrease in birth, which has led to a decrease in the absolute number of children (0-14 years) and an increase in the absolute number and the relative number of the elderly population (60 years and over).

The percentage of the young population (0-14 years) increased slightly on January 1, 2018, compared to July 1, 2015, from 15.5% to 15.6%, while the percentage of the elderly (60 years and older) increased significantly, from 23.9% to 25.1%.

On January 1, 2018, the adult resident population (15-59 years) constituted 59.3% of the entire population, decreasing by 426 thousand compared to July 1, 2015.

The proportion of adults between the ages of 40 and 44, 45-49 years old, and 50 to 54 years has increased, while

adults between the ages of 15 and 19, 20 to 24, 25 to 29 years, 35 to 39 years and 55 to 59 decreased.

10.5 million inhabitants, or 53.8% of the total population of the nation, lived in urban areas since January 1, 2018.

The percentage of the young population (0-14 years) decreased from 14.9% to 14.7% to July 1, 2018, while the percentage of the elderly (60 and more) increased from 21.7% to 23%.

Adults (15-59 years) represent 62.3% of the total population, decreasing by 290.2 thousand compared to July 1, 2015.

12.5 million people, or 56.4% of the total population of the nation, lived in urban areas of July 1, 2018.

At 43.5 years on average, the female population was 3.3 years older than the male population on 1 January 2018. By residence, the average age of the population increased from 40.7 years (on 1 July 2015) at 41.4 years old (July 1, 2015). On 1 July 2018, the median age of the female population was 42.9 years, 3.0 years older than the median age of the male population.

In Romania, there were 187.8 thousand live births with the usual residence in 2018, decreasing by 14.3 thousand compared to 2017 and 14.2 thousand compared to 2015.

The second factor of population mobility, mortality, remained high in Romania.

When we consider Romania's demography, it is important to take into account the substantial increase in the amount of this component.

Because more and more people move to the city, the rural population will grow older than the urban population (5).

AIM

The aim of this study is to analyse the evolution of births at the County Clinical Hospital in Sibiu 2017-2022 period. Specific goals:

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PUBLIC HEALTH AND MANAGEMENT

- O1. Analysis of the age of pregnant women on how they have completed their tasks.
- O2. The analysis of the environment from which the pregnant women are about how they have completed their tasks.
- O3. Analysis of the diagnoses that were made to pregnant women.
- O4. Analysis of the main diagnoses that were made to the pregnant woman at the time of hospitalization.
- O5. Analysis of secondary diagnoses that were put to pregnant at the time of hospitalization.
- O6. Analysis of the procedures that were performed to the pregnant women at the time of hospitalization.

MATERIALS AND METHODS

Regarding the accomplishment of this study, we analysed the data provided by the Sibiu County Clinical Hospital during the period 2017-2022 regarding the age, environment, hospitalization, main diagnosis, secondary diagnosis, condition at discharge and procedure.

We chose to analyse this database provided by the Sibiu County Clinical Hospital, as it is the largest hospital in the area and they have provided us with the data of the last 5 years.

Therefore, we set out to analyse the last 5 years (more precisely 2017-2021).

Through this study we intended to present the evolution of the births at the County Clinical Hospital in Sibiu during 2017-2022.

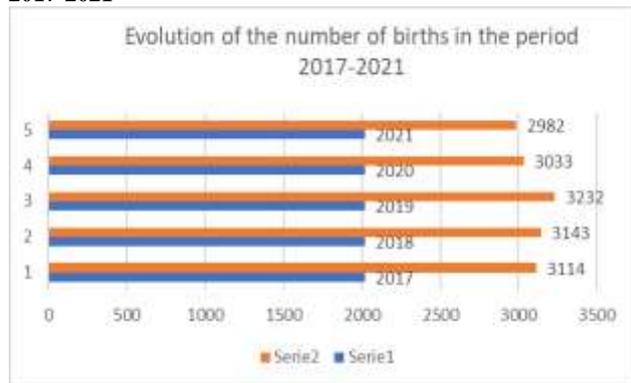
In order to carry out these analyses we used the Excel program.

RESULTS

Based on the data provided by the Sibiu County Clinical Hospital for the last 5 years we have obtained the following results, as follows:

Regarding the evolution of the number of births in the period 2017-2021 we noticed that the year 2019 registered most births (3232), followed by the year 2018 in which 3143 births took place and in 2017 in which 3114 births took place. We also find that the data were close in size, with small differences.

Figure no. 1. Evolution of the number of births in the period 2017-2021



From figure no. 2 entitled Evolution of births in the period 2017-2021 according to the age of pregnant women, we can see that most births were given by pregnant women between 36-44 years (2070 births).

We also made the graph on the evolution of births in the period 2017-2021 depending on the environment of pregnant women. Thus, in the urban environment, most births took place in 2019, more precisely 1917 births, followed by 2018 with 1848 births.

Figure no. 2. Evolution of births in the period 2017-2021 according to the age of pregnant women

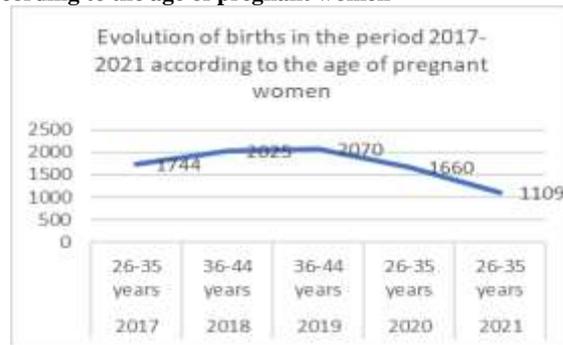
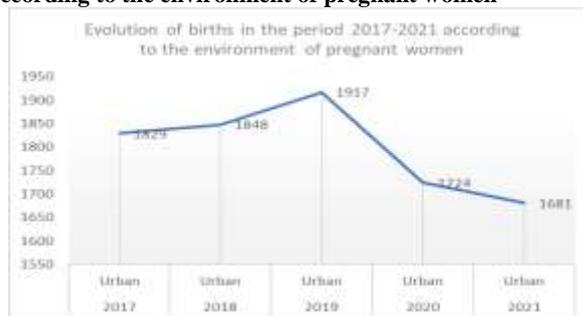


Figure no. 3. Evolution of births in the period 2017-2021 according to the environment of pregnant women



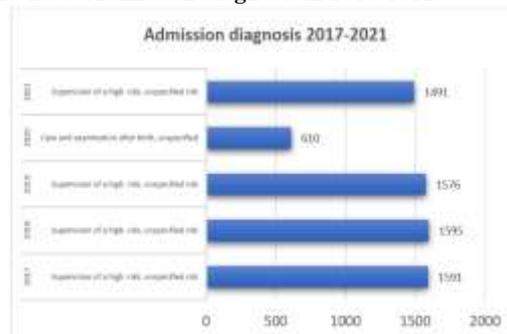
In the rural area most births also took place in 2019, more precisely 1315 births, followed by 2018 with 1309 births.

Figure no. 4. Evolution of births in the period 2017-2021 according to the environment of pregnant women



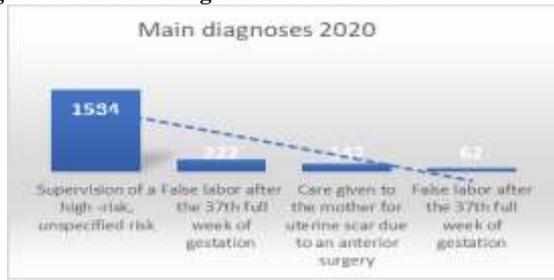
So, we note the fact that in the top of hospitalization diagnoses in the period 2017-2021 was the supervision of a high-risk pregnancy, unspecified.

Figure no. 5. Admission diagnosis in 2017-2021



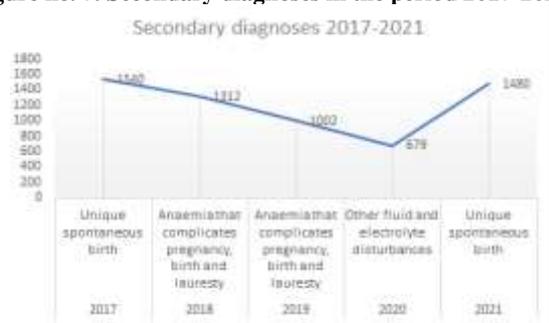
In the top of the main diagnoses is the unique birth by caesarean section, followed by the supervision of an increased, non-specific risk.

Figure no. 6. Main diagnosis in 2017-2021



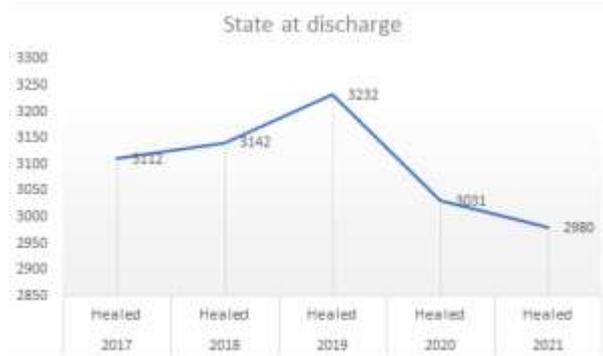
In the top of the secondary diagnoses in the period 2017-2021 there was the unique spontaneous birth and followed by anaemia that complicated the pregnancy, the birth and the confinement.

Figure no. 7. Secondary diagnoses in the period 2017-2021



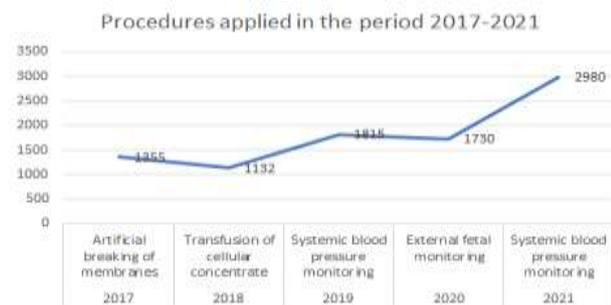
Regarding the state of discharge during 2017-2021, we find that all patients have healed.

Figure no. 8. State of discharge during 2017-2021



In the top of the procedures applied in the period 2017-2021, the monitoring of the systemic blood pressure and the external fetal monitoring is located.

Figure no. 9. Procedures applied in the period 2017-2021



DISCUSSIONS

Most births were given by pregnant women between 36-44 years (2070 births).

We find that in the urban environment there are

several births as opposed to the rural area due to the fact that people in the urban environment have more financial resources and better living conditions as opposed to those in the rural area. Also, adults aged 65 and over represent a greater proportion of the population in rural areas than in the urban environment.

For example, in a study conducted in 1994 by Li and Wang showed that rural migration to urban and variations in birth and rural areas are the main causes of demographic inequalities in China.(6)

In order to promote equitable growth, social and economic prosperity must be braided.(7)

In the period 2020-2021 there were fewer tasks, being slightly decreasing compared to previous years. This also happened because of the pandemic because there was the idea that pregnant women are more susceptible to infectious diseases than the overall population and can experience a “cytokine storm” in response to Covid-19, which can cause serious morbidity.(8)

Regarding the supervision of a high-risk pregnancy, a 2014 study showed that today, 88% of pregnancies have a physiological course at the level of basic care, while in 12% of cases there is a high-risk pregnancy that requires assistance additional and specific. The approach that should be used is to monitor all pregnant women for their potential to have a normal pregnancy until there is clear evidence to the contrary.(2)

Caesarean operations are important for solving specific medical problems during birth, including distortion, intrauterine discomfort, fetus position and other. As a result, caesarean section is a procedure that is necessary for medical reasons. Caesarian operations, however, have increased in popularity in the last 20 years and for social reasons.(1) In terms of spontaneous unique birth, a 2019 study reached the conclusion that premature birth was the most common adverse result that affected 58.5 and 53.7% of monochorionic and dichorionic twin pregnancies.(10)

On the monitoring side of systemic blood pressure, a 2018 study showed that one of the most widespread medical conditions that complicate the pregnancy is high blood pressure, which can affect up to 10% of pregnancies. Thus, the study came to the conclusion that the precise measurement of blood pressure during pregnancy is essential to guide the medical decisions that affect both the mother and the fetus.(11)

CONCLUSIONS

The purpose of this study was to analyse the evolution of births at the County Clinical Hospital in Sibiu during 2017-2022.

Regarding the accomplishment of this study, we analysed the data provided by the County Clinical Hospital in Sibiu during the period 2017-2022 regarding the age, environment, hospitalization, main diagnosis, secondary diagnosis, condition at discharge and procedure.

Following the data analysis, we have obtained the following results:

Regarding the age of the pregnant women, we could see that most births were given by pregnant women between 36-44 years (2070 births). This is also the age when most women wish a child because the financial and professional accomplishment has been achieved.

In the urban environment there are most births as opposed to the rural area. In the urban environment, most births took place in 2019, more precisely 1917 births. In the rural area most births also took place in 2019, more precisely 1315 births.

In the top of the hospitalization diagnoses registered at the Sibiu County Clinical Hospital, there is the supervision of a high-risk pregnancy, unspecified.

On the part of the main diagnosis registered at the

Sibiu County Clinical Hospital, there are unique cesarean births.

In the top of the secondary diagnoses in the period 2017-2021 there was the unique spontaneous birth followed by anaemia that complicated the pregnancy, birth and the confinement.

We also analysed the condition at discharge during 2017-2021 and found that all patients were cured.

Regarding the procedures applied in the period 2017-2021, the monitoring of the systemic blood pressure and the external fetal monitoring were located.

All six goals were achieved in this study.

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