SEMASHKO HEALTH FINANCING MODEL – ECONOMIC AND HEALTH CONSEQUENCES IN CZECHIA

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Abstract
In 1948, the Communist Party finally defeated the Czechoslovak government over the next few years and adapted the Czechoslovak economy to the other countries of the USSR over the next few years. On the basis of this was also nationalized the health care, which passed to Semashko model of financing and organization of health care. Given that this model currently only works in Cuba, the aim of this article is to describe the Semashko model and its effect on the health of the pSeopulation from historical data. At the same time, it is compared in several places with the current results of the Czech health service, which operates on the basis of the Bismarck model.

Key words: *financing of health care, public expenditure, health insurance, public health, health system*

JEL Classification: *I15, I18, I11, H51*

I. INTRODUCTION

In February 1948 there was a series of events that led to the full takeover of power by the Communist government. Formally, the Communists had confirmed the takeover of power in the 1948 May elections (no parties could be elected, only a single candidate, elections were not secret). The Communists completely controlled the events in the state, and the transition of Czechoslovakia to a block of countries with a socialist regime was completed. At the same time, there was a definitive nationalization of all sectors of the economy. There has been nationalization of healthcare. The aim of this article is to describe the course of nationalization of the Czech healthcare system. The transition from the Bismarck model to the Semashko model and the impact of this model of health financing on the health of the population.

II. NATIONALIZATION OF CZECHOSLOVAKIA

In 1948 the Act No. 99/1949 Coll., On National Insurance of Unified Sickness (PSP,1948) and Pension Insurance, was united into one compulsory deduction system. This law abolished all previous statutory provisions on insurance and the implementation of the new concept of national insurance which was to unify the benefit system into one closed system. The aim was also to ensure national insurance for all citizens and cover the widest range of social events. The administration of this system was started by the Central National Insurance Company. However, funds were allocated to pension and sickness insurance funds. Supervision of the Central National Insurance Company was carried out by the Ministry of Social Welfare in the agreement of the Ministry of Health and the Ministry of Finance. At the same time however the management of the insurance company is subject to the control of the Supreme Audit Office. This system was based on the principles of the Bismarck Health System.

In 1951 Act No. 102/1951 Coll., On Reconstruction of National Insurance (PSP, 1951), was adopted. The essence of the law, which proclaimed the approximation of sickness insurance to the working people, the system of merit and the simplification and rationalization of the system, was the gradual transfer of sickness insurance to trade unions and the transition to Semashko model.

In 1953 Decree No. 100/1953 Coll. - Decree publishing the measures of the Central Council of Unions on the organization and implementation of sickness insurance for employees (PSP, 1953). This Decree has made the Top Sickness Insurance Authority for Employees, the Central Council of Trade Unions, the Sickness Insurance Administrator, has appointed a working association in the Revolutionary Trade Union Movement. Revenues and expenditures have been declared part of socialist ownership and part of state revenues and expenditures.

Act No. 54/1956 Coll. on Sickness Insurance for Employees (PSP, 1956), set the Central Council of

Trade Unions to reorganize health care. In particular, it has ordered the Council to issue measures on the organization and manner of performing employee sickness insurance, including the determination of the powers, responsibilities and responsibilities of individual trade union bodies to take measures for decision-making on sickness insurance benefits, sickness insurance benefits, premium premiums, penalties and income claims for compensation of benefits paid to employers and other persons.

The above-mentioned laws were mainly important in terms of financing the healthcare system. From the point of view of organization of health care, however, the most important was Act No. 103/1951 Coll., On Unified Preventive and Medical Care (PSP, 1951). The law organizes the provision of healthcare based on healthcare facilities defined later by national committees under the Ministry of Health directive. Providing preventative and curative care should take place in the following high-performance healthcare facilities:

- District and regional hospitals with a medical center
- Vocational institutes for treatment and care, including climatic and spa facilities, including tuberculosis, psychiatric hospitals, other specialized hospitals, sanatoriums, night sanatoriums, nursing homes
- Outpatient care facilities - nursing homes, medical stations, district and district health care and regional
- Welfare facilities for women and children - nursing homes, infant homes, children's homes, nurseries, women's clinics, children's clinics
- Research institutes in the field of preventive and curative care
- Transfusion stations, rescue stations.

All these facilities were established and operated by state administration bodies under the law unless they are racing. Such facilities are then managed and funded directly by races. All preventive and curative care facilities were subordinated to national committees or, given their importance, directly to the Ministry of Health.

As of January 1952, all movable and immovable property of the Central National Insurance Company, which was used for health purposes in state ownership, was transferred without compensation. Only items for special medical purposes were removed. Substitutions were transferred to the same date as real estate which was not owned by the Central Health Insurance Company but was used to run medical centers and outpatient clinics. Further, they were Act No. 54/1956 Coll. Abolished almost all health care laws that were valid until then.

Regulation No. 24/1952 Coll. The Order of the Minister of Health on the organization of preventive and curative care (Zakonyprolidi, 1952) has completed the organization of health care. Established District and National Institutes of Health (OÚNZ), which unified the uniforms of district hospitals with district medical centers, maternity hospitals, district medical facilities, medical centers, women's clinics, nursing homes, nursing homes, emergency services, night sanatoriums and transfusion stations. These listed establishments were grouped together in the District National Health Institutions, which belonged to the district national committees, which formed a single organizational, administrative and economic unit, with a separate budget and accounting, headed by a medical director. In addition, Regional National Health Institutions (KÚNZ) were established, which brought together regional health centers, transfusion stations and regional rescue services.

By this law, the nationalization of healthcare was essentially completed. The health care system has thus become available to all citizens free of charge and has been funded through the state budget.

Thus, the Czechoslovak Socialist Party (CSSR) ranked among the other countries of the Soviet Union that have implemented a healthcare system, which we call today Semashko Model.

Semashko model of financing and organization of healthcare is based on the following characteristics, which are clear from the description of nationalization and organization of health care in the 1950s. It is a centralized model of health care, where all facilities are owned by the state. The provision of health care is centrally planned. All healthcare services are provided free of charge and financed through the state budget. All staff of healthcare facilities are considered civil servants.

Basic demographic characteristics important from a health perspective

In 1955, the Semashko system was already fully stabilized, so this year can be considered as the starting point for statistical data.

III. DEVELOPMENT OF BIRTH RATES

The post-World War II period is referred to as the "first epoch", when after the Second World War, birth rates have increased considerably. As can be seen from the chart, in the Czech Republic the increase in fertility was not so intense and long. On the territory of the Protectorate of Bohemia and Moravia, the number of born children was increased compared to the previous period. After the war, fertility was limited by an unfavorable economic situation, poor housing policy, limited services, and a lack of pre-school care facilities. The decline in fertility was also influenced by the adopted legislation in force as of January 1, 1958, which allowed artificial discontinuation of pregnancy I for reasons other than health as it was until then. The growing trend of artificial interrupted pregnancy is evident from the graph.

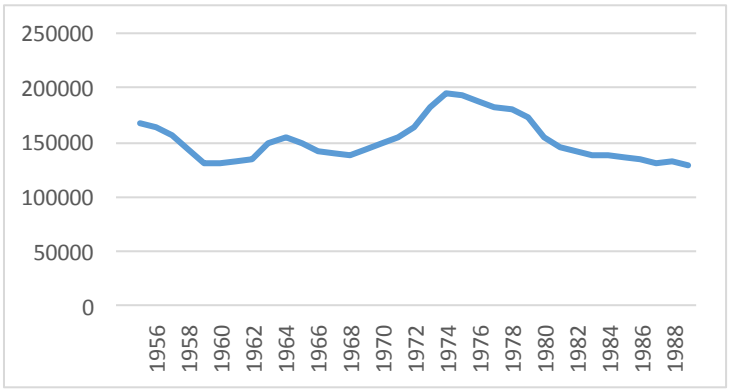

Figure 1 – Births Total (1955-1990)
Source:CZSO.cz

At the beginning of the 60s, the birth rate was the same level of reproduction, with a birth rate of 2.1 births per woman. In 1962, a pro-population policy was proclaimed at the Communist Party's congress, which affected birth rate increase between 1963 and 1964, when total fertility increased to 2.3 live births per woman of reproductive age. In the following period until 1968, the propensity declined to 1.8, because the proclaimed propositional measures were not applied for economic reasons. In November 1971, platnsot legislated to support birth rates by measures such as raising maternity allowance to double, increasing child allowances. In 1973, economically advantageous honeymoon loans were introduced. Meanwhile, pre-school care facilities were built. These measures led to a birth rate increase of up to 2.43 in 1974. Thanks to these measures, the birth rate continued to be high until 1979. However, since 1975 it has also declined thanks to a significant increase in abortions.[10]

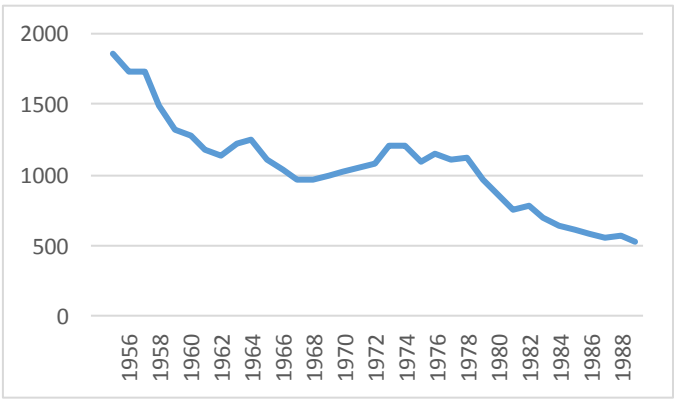

Figure 2 – Death Birth (1955-1990)
Source:CZSO.cz

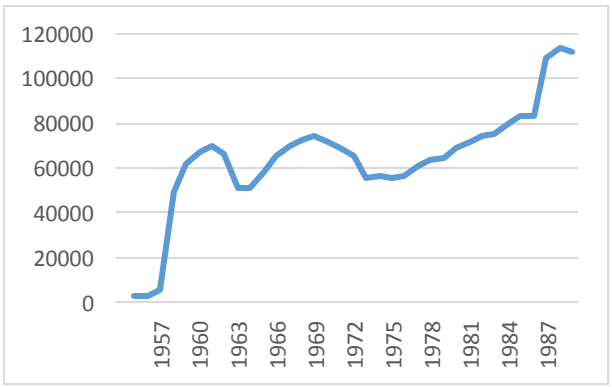

Figure 3 –Artificial interruption of pregnancy (1955-1990)

One of the hallmarks of the quality of the healthcare system is morbidity, neonatal and infant mortality. It has steadily declined in the territory of today's Czech Republic, a trend that has been maintained until today, when we have one of the lowest infant mortality in the world.

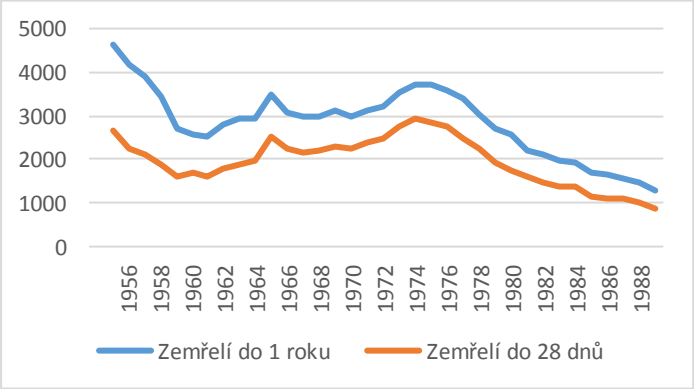

Figure 4 – Neonatal mortality (1955-1990)
Source:CZSO.cz

Life expectancy at birth is one of the most important indicators of the quality of health care and society's standard of living. During 40 years of socialist health, life expectancy grew at birth from 62.3 years to 67.6 in 1990, thus increasing by 5.3 years. To compare from the Revolution, assuming the starting year of 1990, increased the life expectancy at birth to 78.8 years[11]. That is, it grew by 11.2 years in 25 years. Of course, this difference is not just a health improvement, but an increase in GDP, an improvement in lifestyle, an increase in the standard of living of the population, etc. But healthcare progress that we would probably not be able to afford in the socialist economy and people dying for diseases we consider to be less serious today , it certainly plays its part.

Table 1. Life expectancy at birth

Year of birth	Life expectancy
1950	62,3
1955	66,6
1960	67,9
1965	67,1
1970	66,1
1975	67,1
1980	66,8
1985	67,5
1990	67,6

Source:CZSO.cz

IV. EVOLUTION OF THE NUMBER OF PHYSICIANS

The development of the number of physicians per 1000 inhabitants was generally positive. In 1955 there were approximately 1.5 doctors per 1000 inhabitants in the Czechoslovak Socialist Republic, with the World Health Organization recommending 2.5 doctors per 1000 inhabitants to maintain the minimum required standard[12]. This point reached the Czech Republic in 1975 and since then the number of doctors has increased.

Table 2. Evolution of the number of physicians

Year	Number of physicians	Number of physicians per 1 000 inhabitants
1955	14,009	1,490
1960	17 838	1,825
1965	19,888	2,029
1970	21,969	2,240
1975	25,176	2,494
1980	28,878	2,806
1985	32,614	3,154
1990	34,372	3,316

Source:CZSO.cz

V. HEALTHCARE EXPENDITURE

Healthcare per capita spending has been rising steadily, especially in terms of per capita GDP and average wage. Whereas in 1965, per capita spending in 1990 was equal to the average wage compared to the average wage in 1990. In 2015, the average wage in the 4th quarter was 26 467 CZK (CZSO, 2015), the healthcare expenditure per capita was CZSK 25 503 and the GDP per capita was CZSK 435 462.

Table 3. Evolution of the number of physicians

Year	Health expenditure per capita in CZSK	GDP per capita	Average wage in CZSK
1965	526	53391	1 493
1970	850	42872	1 937
1975	1230	40696	2 313
1980	1469	42943	2 637
1985	1931	57315	2 920
1990	2900	45287	3 286

Source:CZSO.cz

VI. CONCLUSION

From statistical data, it may seem that socialist healthcare was not so bad, and it is the fact that in the territory of today's Czech Republic managed to maintain the character of Western health even under socialism. However, what the statistics do not say is that by setting up a system of district doctors and catchment areas, the competition has completely disappeared from healthcare, because even if the patient did not meet the doctor, he had to go to him because he lived in his catchment area. Even in the Czech Republic even today a colloquial practitioner is called colloquial practitioner. Another problem of socialist healthcare was the considerable degree of corruption that stemmed from the rigidity of the system. And so, as the whole socialist economy was lagging behind in health care, only a limited amount of money was made, and perhaps not expensive foreign medicines. It is no coincidence that the life expectancy has increased by more than 11 years since the transformation of the economy.

VII. ACKNOWLEDGMENT

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