Analysis of the Health State of the Population in Budapest VIIIth district

PhD Thesis

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Budapest
2012

Introduction

The early death rate of the population of District VIII (Józsefváros) is strikingly high as compared to the other districts of the capital while the number of cultural, healthcare institutions located in this territory of great historical past is much higher than in the other parts of the city.

Until the middle of the XX. Century the central location had a key, very advantageous role in the development of the district but today – due to the transformation of the society - is rather a disadvantage. With the industry being displaced and the traffic network being built the workers' housing estates around the former factory plants have become out of date. The original inhabitants of the district are dying out or owing off owing to the disadvantageous living conditions and the level of the education and income of those who are moving in or staying will depend on whether there has been or is being a conscious, successful rehabilitation completed in the district.

In the interest of the consciously planned rehabilitation the district government carried out a socio-economic survey in the course of which the parts of the district that shared the same fate from architectural and sociological viewpoints have been analyzed separately and also compared with each other. There have been 11 district parts, so called quarters differentiated.

Aim

The aim of my dissertations is to develop a health picture about the inhabitants of the district that is well-differentiated according to the quarters,

- The judgments of the district is severely influenced by the fact that several homeless shelters report homeless people as the residents of the district VIII and their early mortality strongly distorts the overall data of district,
- The bad state of health shown by the statistics of the district, just like the bad economic situation is typical only of some smaller, very densely populated areas of the district,
- The changes in the organization of the district healthcare services have not favored the inhabitants. The access to healthcare services is not complete for certain areas and residents.

Methods

The analysis based on. a mortality and a morbidity study.

The first study (I) deals with the early-death risk, consequently uses mortality data:

- The mortality data of the quarters – grouped by sex and age – derive from the summary of the probate data of 2005-2008. T

- The demographic data that are the basis of the comparison with the capital data were given by OEK using the data of KSH

- The sociological data come from a sociological survey carried out on the district government's authority

- For the description of the structure of mortality I applied distribution ratios and for the analysis of territorial mortality inequalities I used the Rapid Inquire Facility (RIF) software. The analysis of territorial mortality inequalities was done by means of Standardized Mortality Quotient corrected by hierarchical Bayesian estimation and then with the RIF disease mapping function. The blocks of buildings were analyzed with SatScan program. In the course of indirect standardization the age-specific mortality rates of Budapest (in 10-year age-group breakdown) were applied. The map views were produced by means of a geographical information system and map managing software called ArcGIS.

The data for the tests performed in the laboratory of the outpatient centre in the given time interval as a basis required for the analysis were joined to anthropological anamnestical and other data given by GP's and analyses them according to the places of residence quarters in the second study (II):

- The data from the blood glucose and blood lipid levels required for the study come from the list made about the 2005. January-February traffic of the outpatient centre responsible for outpatient care in the district. 46 GP's workings in the district were involved in the consultation. The data 1527 persons were processed.

- I calculated the risk on the basis of the Framingham study by using the windows-base program developed by Prof. Dr. Berentey Ernő.

- The obtained data were analyzed by using an Excel program. I calculated the significance level and the territorial representation with Khi2 probe.

Results

- There are considerable differences in risk of the immaturity death.

- Living in quarter Magdolna, Central Józsefváros, quarters Orczy and Szigony means high early death risk for both sexes. Living in quarters Palota and Tisztviselő means the lowest risk.

- As regards the average age at the time of death the difference between the worst and the best quarter is 13 years for men and 10 years for women, which means a higher difference

than early mortality difference between the districts of the capital.

- A correlation between the high mortality risk and the low schooling level can be proved unambiguously, but the connection with the low comfort level of the flats is only partial.

- The connection between the very low schooling level and the high mortality risk can be proved even on the level of blocks.

- In the quarters with high early death risk the GP's of the deceased had little information about them, which means that these people did not go to see their GPs in their lives.

- After clearing the data from the distortion caused by the data of the deceased who died in certain homeless shelters the mortality risk of Central Józsefváros, and thus that of the district proved to be lower.

- In study II when analyzing the GPs' data in the quarters individually we could not find significant differences in the quarters but here were indicative ones: e.g. In the quarter Magdolna the proportion of extreme obesity was higher and the average age of the subjects was some lower.

- It was detectable: the number of the laboratory tests performed in the laboratory of the outpatient centre does not represent the

number of the inhabitants whose healthcare the centre is responsible for. The quarters with relatively better state of health are less represented in the number of performed laboratory tests, while the number of the patients who use the laboratory services but are not the residents of the district is high.

- The knowledge of the history of the district can give some explanation for these phenomena which cannot be neglected when preparing a district healthcare plan and organizing the healthcare services of the district.

Conclusions

- As regards to their sociological and health status the population of Józsefváros cannot be considered homogenous.

- The health status and schooling level of the residents are in a very sensitive correlation. Given the big differences in the residents' socio-economic and health status the success in establishing stable residential communities was the main impetus in the district.

Summary

Józsefváros, the district VIII of Budapest is known to have the least favorable mortality rate that is 25% higher than the average rate of Budapest. Although this district with its great historical past gives home to the majority of

the capital's healthcare institutions, to several educational and other institutes, all of them representing great cultural value, the mortality risk of people – men in particular- living here is much higher than that of the inhabitants in other districts. In addition the after-tax income is the smallest, the schooling level is strikingly low and the rate of unemployed is very high as compared to the other districts of the capital. The urban renewal program divides the district into 11 parts, so called quarters that are distinguishable from historical, architectural and sociological viewpoints. This division gives the basis of the detailed examination of the mortality in the district. The comparison between the early mortality and the socio-economic differences revealed in the urban renewal program confirms the hypothesis that there are great social - and consequently enormous health inequalities between the quarters. The residents of quarter Magdolna live with much worse life expectancy and socio-economic background than the people in any other parts of the district, while the life expectancy of people living in the quarters Tisztviselő or inner-town Palota or the relatively young quarter in Százados út exceeds the Budapest average. The architectural characteristics of the several quarters also suggests that there were people of similar fate, profession and social position living in the given buildings who had stable residential communities. The inhabitants in the quarters that have been able to keep their stable communities or reestablish them are living in a much better socio-economic and health status than the capital average. In the historical parts, however, where the residents lost the

original way how they had earned their living the consistency of the buildings have been deteriorating and more and more 'immigrants' have moved in taking the place of the original residents who consider their present homes temporary and do not have any intention to establish a community. These quarters are in a worse situation: quarter Magdolna should be first mentioned here where after losing their work the well-off Gipsy musicians have been reduced to poverty and now are living together with impoverished people arriving here from the country in deep poverty. The central location of the quarter, which earlier made the quarter of key importance from traffic considerations has become rather a disadvantage by now. The buildings with very low comfort level and in poor condition were difficult to use as living homes so they often become homeless shelters./social institutes Their presence have resulted in another degradation in the life of the district and the devaluation of the living houses in certain quarters. Some homeless shelters registered/reported so many fictions residents at their own addresses as the residents of Józsefváros that the early deaths of these people, who are known to have very high mortality risk, increase the mortality risk of the whole district.

Although the district is provided with the highest number of healthcare institutes, very few of them actually accept patients from district VIII. The former in-patient institutes that provided expressively VIII-district residents have been closed down or their profile has changed so that they are not able to undertake this task any more. The out-patient clinic owned by the district government has been placed in a territory of bad

reputation so one part of the inhabitants does not use its services. Even the primary care level of healthcare provision does not cover the total number inhabitants of the district since my research shows that among the people who died early the proportion of those who were unknown for their GP's is strikingly high. This phenomenon calls the attention not only to the fictions registrations but also to that condition that there exists a certain layer of people who do not use healthcare services even in very bad health condition. As a conclusion: the health-promotion plan of the district should be devised for at least quarters and not for a territory as a whole. On the other hand the prevention plans should not be based on the existing healthcare system only since even the GP's network is not able to find the people who are the most dangered.

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