

THE BUILDINGS' MANAGEMENT IN THE SANITARY PUBLIC SYSTEM OF BIHOR DISTRICT - DETAILED RESEARCH

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ABSTRACT

For the last twenty years the use of the buildings based on a technology that provides the management of the information streams, from the different points of view (services, administrative, financial), had a successful evolution.

Nowadays the modern building is supplied by an infrastructure which improvement of comfort conditions and increase in a level of persons' safety allows to adapt and correspond constantly to the changes of conditions as the result of the effective utilization of resources.

Owing to the use of the management in buildings, in present clauses it is underlined that the important part in this measure is the improvement of the consumers' comfort, reflected in the increase of the service contentment degree of the hospitalized patients and the quality of the provided medical services. From this point of view, the Geographical Information System is presented as the necessary operational tool of the sanitary management's establishments which provides the authenticity, the accuracy of the information and the objectivity of the basic estimations, the formulation and the introduction of the strategic development policy, the decisions and the control of sanitary establishments.

Keywords: Management, building, database, Information Geographical System, medical services, patients.

1. INTRODUCTION

THE IMPORTANCE

The present report emphasizes the importance of the effective management of the buildings in the improvement of delivery and increase in the reference to services of health and, in particular, in the organization and work of sanitary establishments with beds.

The hospitals are organized depending on specificity of a pathology in the general hospitals or hospitals with a single specialisation and have in their structure separate sections for treatment and providing special care of patients with acute and chronic diseases.

The sanitary establishments with the beds (hospitals, institutes, the centers of health and medicine) provide special medical services: preventive, curative, urgent, recovery and palliative, and also before, during and after the birthgiving, participating in an integrated system with primary and out-patient special health services, with the purpose of the population's health maintenance.

The Geographical Information System provides the management of informational streams, in frame of the buildings' management of a sanitary area.

THE PURPOSE

The purpose of the buildings management in the sanitary system is to perform the quality of service and to provide efficiency of access to the medical services, rendered by

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sanitary establishments with beds, for all categories of persons, from urban and rural territories; to adults, children, workers, unemployed, socially poor persons and persons with small incomes or without them.

2. RESEARCH METHODS

Choice of research methods, processing of information

The applied way of research of this report is the way of monitoring consisting in supervision over processes of the phenomena and the subsequent dynamic analysis or comparison of several phenomena, finishing synthesis of the basic characteristics. This way of research methods by grouping under the basic characteristics are applied, grouping obtained data under personal characteristics (the served population, structure of the buildings, quality indicators of rendered services and so on), spatial (local placement – space arrangement) and under time characteristics. Also, the way of supervision was carried out also by interrogations in occasion concerning the contentment degree of the hospitalized patients. The present work is an observant, retrospective and descriptive research.

3. RESULTS AND DISCUSSIONS

The consumers` satisfaction of medical services makes a complex combination of necessary needs, expectations about nursery and the experience concerning nursery services received by them.

The territorial site, the aspect, the structure, the useful area and the level of deterioration of the sanitary establishment makes the important criterion when the consumer searches for medical services of high quality.

The proper utilization and service of the buildings and of the belonging equipment are necessary for achievement of efficiency, according to qualitative design parameters.

There is a number of the important characteristics which need to be accomplished by the medical services. For the present report have been considered the following:

- availability
- adequacy
- reference
- acceptability
- professional competence
- physical safety

AVAILABILITY

The first requirement to any medical service consists in disponibility and accessibility to those who require it. It is very clearly that if in any society necessary medical services does not exist or are not available, or exists and are available but are not easy to obtain, the quality of medical services descreases.

Availability is refered to the consumers` oportunity to receive medical service at the right place and at the right time, depending on their needs. It assumes interdiction's absence of the following order: geographical, economical, financial, social, cultural, organizational or a linguistic barrier.

In Bihor district, the total number of the population and territorial distribution are specified in table I and figures 1,2,3.

Total number of the population of Bihor district and on territories, in 1992,1998, 2004

Table 1

TERRITORY	THE POPULATION		
	1992	1998	2004
Oradea	326980	326077	312633
Alesd	52310	51815	50128
Beius	102098	101433	95191
Marghita	83106	83560	80044
Salonta	61102	61272	58965
Total in Bihor	625596	624157	596961

From the applied table it is noticeable the reduction of the population by 4,5 % at a level of district Bihor in a 13 year period (1992-2004). This tendency of reduction is also kept on territories, for example, in the territory of Beius city it is ascertained the most significant reduction of the population (6,8 %). The explanation comes with the migration of the young population to the most accessible territories from the social and economical point of view, especially geographical, as the territory of Beius city is in a mountain-hilly zone, with scattered villages where roads on wintertime are remote.

Another prominent aspect, observed in a long time, was the population distribution on districts (cities and villages) and the quantitative evolution of the population in frame of the examined territory. For research of the phenomenon in dynamics, have been composed maps (map 1, map 2, map 3) where cities and villages have been shaded depending on the quantity of the territory's inhabitants (the quantity of the population is represented by different color tones, from light to dark; the light color tones correspond to a number of inhabitants around 1000 and 5000, and to the most dark color there correspond 21001-210000 inhabitants).

Analyzing the maps it is possible to notice the concentration of the population in the cities: Oradea, Salonta, Marghita, Beius, Alesd- the average population in field zones and the population with small quantity of inhabitants in mountain zones.

The quantitative evolution in time of the inhabitants on territories has no greater changes, except the reduction of inhabitants` number in Salonta city and Buntesti village from Beius area (the change has occurred on a single rank- 5000 inhabitants).

From the graphical representation, it is possible to notice:

- The concentration of the population in the city zones that has led to the increase of pressure for the medical services in these zones,
- The small quantity of inhabitants from remote zones, the access improvement to these zones by means of municipal roads, the clearness of the First Aid District Service has led to the reduction of negative pressure on the buildings of sanitary system.

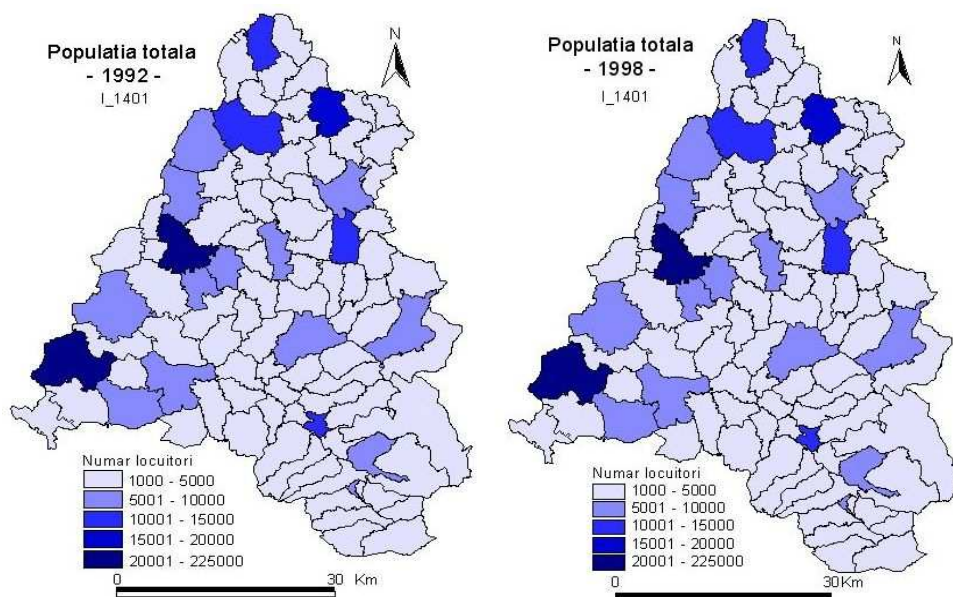


Fig. 1 *The population of Bihor district in 1992*

Fig. 2 *The population of Bihor district in 1998*

The change of the leG.I.Station in this time interval has not strongly affected the construction or the disappearance of hospitals. It has affected only the Centers of Health.

We apply distribution maps of four categories of sanitary establishments with beds, achieved on the base of their topographical data.

On the map⁴ it is possible to notice the counterbalanced distribution of hospitals to territories with which the respective availability of the population to services of hospitals are provided.

Owing to the complex character of the buildings' management, in our research were analyzed five hospitals selected in accord with the territorial arrangement and the rendered medical services (the general hospitals):

- The Clinical Hospital District Oradea
- The Municipal Hospital „Ep. N. Popovici” Beiuş
- The Municipal Hospital „Dr. Pop Mircea” Marghita
- The Municipal Hospital Salonta
- City Hospital Aleşd

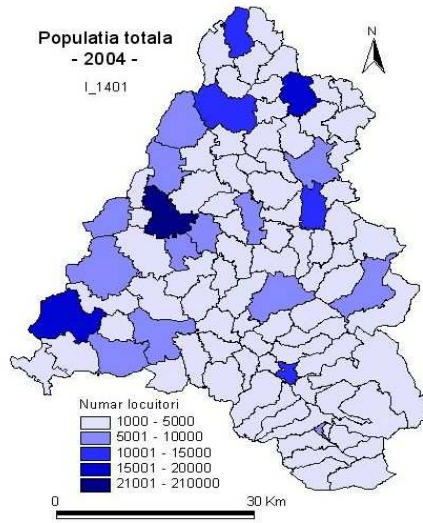


Fig. 3 The population of Bihor district in 2004

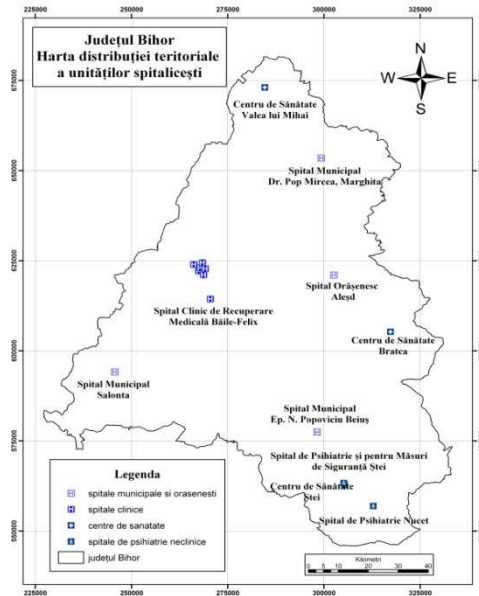


Fig. 4 Hospitals of Bihor district

Each sanitary establishment provides special health services for the population of Oradea city and to the next localities: Beius, Marghita, Salonta, Alesd and the population from the next villages, serving a large percent of cases from district, owing to branches in hospitals. The arrangement of each establishment on the main street of the city provides an easy access to the population and to the first aid service.

The task of each hospital is to maintain a qualitative medical activity, at the high professional level, observing for increase in incomes according to the prices, receiving the maximum contentment concerning the rendered activity, both from the personnel and patients.

THE ADEQUACY

The concept of adequacy is closely connected with attempts of reduction concerning the used resources in order to supervise the prices in the health system. Particularly, we mean that if the services received by the patient correspond to his health requirements, he will be satisfied, regardless of the location or duration of the medical service.

From this point of view was traced the structure of branches with a number of beds, their time evolution (1992, 1998, 2004) in the analyzed hospitals. The obtained data are specified in table IV and on maps 6-7.

In the majority of the hospitals and in their branches it is possible to notice a reduction of the beds' number. The diabetes and gastroenterology's branches make an exception. The number of the beds has been reduced up to 25, therefore there are no significant changes on the maps concerning the beds' number in hospitals.

The most complex hospital considering from the variety of the branches is Oradea District Hospital, the main territorial hospital, which in 1992 had 1243 beds, and in 2004 a reduction of 14 % is observed. There were not formed or disbanded any of the branches.

During the observable period, at The Beius Hospital, we observe the formation of 2 branches in 2004: Orthopedy, traumatology and Neurology.

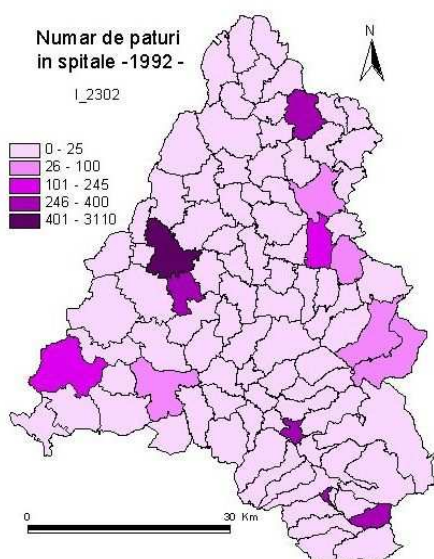


Fig. 5 The numbers of the beds in hospitals in 1992

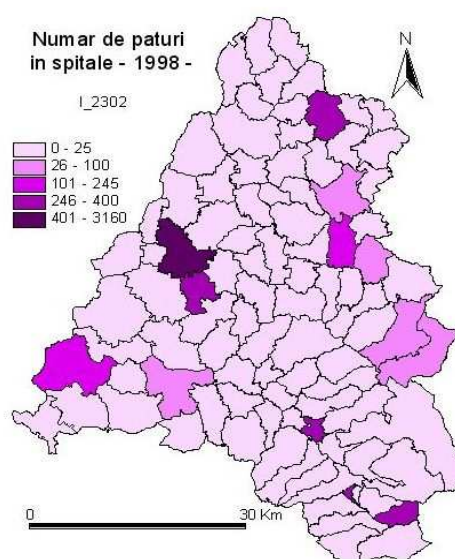


Fig. 6 The number of the beds in hospitals in 1998

THE REFERENCE

The activity of a hospital is displayed by the number of the patients that apply to the hospital's services.

The result of the activity is reflected by a number of parameters:

- parameters of volume and intensity of the activity;
- parameters of the services` type;
- parameters of the surgical activity;
- parameters of the functional research;
- parameters of the radiological research;
- parameters of the activity`s complexity;
- parameters of the hospitalization`s conditions;
- parameters of the death rate;
- other parameters (nosocomial infections, repeatedly hospitalized patients and so on)

It should be mentioned that these parameters have to be observed at a national level, in order to get a comparative analysis.

The IOH (International Organization of Health) reports also assume the comparative analysis with other countries in order to define strategies on average terms, considering the integration with the EU.

THE PROFESSIONAL COMPETENCE

Even though it is based on technology, the medical service remains, basically, a process in which people are in mutual relation with other people. In order to satisfy the human needs in an efficient way it is necessary to provide the medical services by an optimum number of experts with the corresponding and competent preparation.

In the applied maps (maps 18 - 14) are represented in evolution (1992, 1998 and 2004) the number of the doctors from the public sectors, the average sanitary personnel and the average number of workers in health activity and social service.

There are no significant changes observed during the time considering the number of the employed medical personnel.

The professional competence starts with the existence of the high quality clinical achievements, expressed in duly maintenance of the preventive educational service, diagnostically and effective therapeutically services in order to define and satisfy the patient's needs.

In a simple way, the medical care of the patient includes a few stages:

- the inspection of the patient
- identification of the problems, definition of the diagnosis
- the treatment
- continuous supervision

The distribution of all knowledge and skills of an individual expert, the credibility, the decency, the confidentiality, the seriousness and the reputation of the personnel proved by the previous preparation and achievements are very important for successful reception.

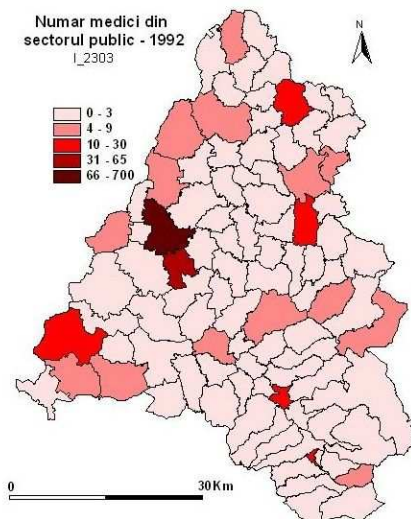


Fig. 7 The number of the doctors in the public sector, 1992. A card '9 Average sanitary personnel,

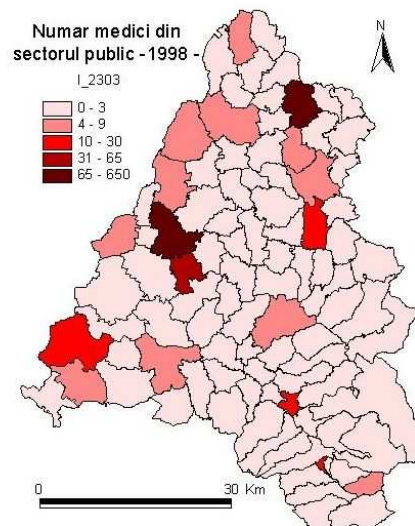


Fig. 8 The number of the doctors in the public sector, 1998

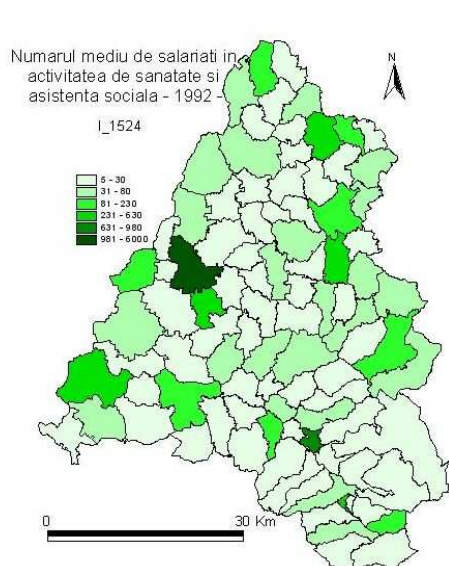


Fig. 9 The average number of the workers in health act. and soc. service, 1992

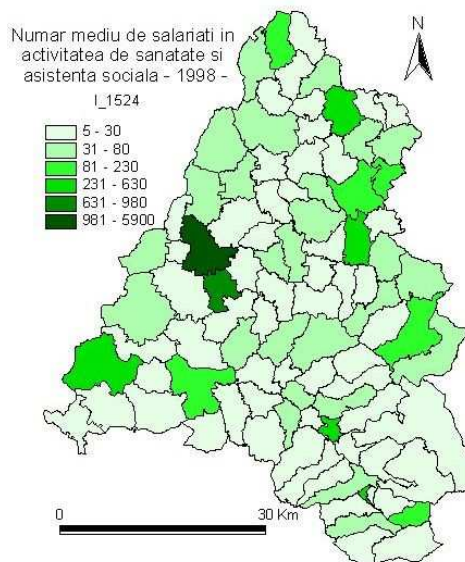


Fig. 10 The average number of the workers in health act. and soc. service,

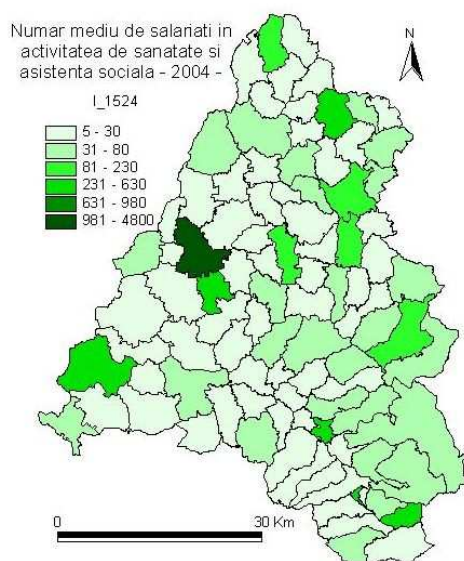


Fig. 11 The average number of workers in health and social activity service, 2004

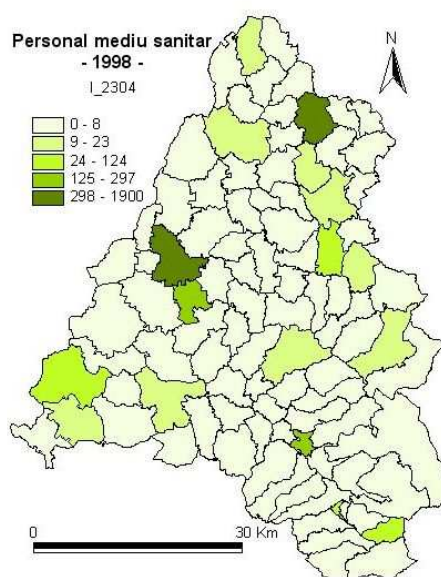


Fig. 12 The average sanitary personnel 1998

The importance of the expert's competence is associated with a competent management necessity. The managers should be able to maintain the required norms and positions that are being in a rapid evolution and the economical pressures which demand a high competition of health establishments.

4. CONCLUSIONS

The maintenance of an effective buildings' management of a sanitary site is an absolute need, a corresponding operation and service of buildings and the belonging equipment according to the design parameters of quality, being the first requirement in quality assurance.

For the management of the buildings it is necessary to pass the following steps:

- the definition of its condition - inspections, examinations, to estimate the existing situation and to establish the general and local objective
- the definition of the charges
- the corresponding service - the introduction of the action plan
- the information and comprehension of the patients

The *advantages* of an effective management are:

- the essential reduction of the prices
- the opportunities to manage and control
- the improvement of the consumers' comfort (both for the patients and personnel)
- the raised ability to prevent the different components dysfunction
- the centralized control of the operational systems

Availability is referred to the consumers' opportunity to receive medical service at the right place and at the right time, depending on their needs. In Bihor district the concentration of the population in city zones leads to the increase of pressure in the sanitary services of these zones and the reduced number of the inhabitants from the remote zones, the access improvement of these zones by means of municipal roads, the clearness of the First Aid District Service's work has led to the reduction of the negative pressure on the buildings from the sanitary system.

The change of the leG.I.Slation in this time interval has not strongly affected the construction or the disappearance of hospitals. It has affected only the Centers of Health.

Each sanitary establishment provides special health services for the urban population and to the next localities. The arrangement of each establishment on the main street of the city provides an easy access to the population and to the first aid service.

The patients change the hospital or the doctor owing to their discontent concerning the received medical services in hospitals from the quality points of view. This attitude makes a stimulant competition and improves quality in medical area of hospitals.

The concept of adequacy is closely connected with attempts of reduction concerning the used resources in order to supervise the prices in the health system. In the majority of hospitals and in their branches, it is possible to notice a reduction of the beds' number, except the diabetes and the gastroenterology branches.

Reducing the average duration of hospitalization, the number of the patients has increased leading to a high pressure on the building. Also, the lack of the beds' number has increased in all hospitals.

The conveniency (for example, disposed hours of consultations), the communication and comfort can affect the final result of the medical services. When the patient and his family

are well informed and calm they will be able to understand the therapeutical options, to make the right decisions, to take part during the medical treatment and to be realistic concerning the results of the medical care.

The satisfaction of the patients taken on research consist in 59 %; patients were mostly dissatisfied with the accomodation, food and medicines then with the received health services. This is why the satisfaction of the hospitalized patients depends on the buildings' conditions that has an influence upon the patients, because the hospital rooms are too large, the toilets and bathrooms are mixed and the furniture is too old and so on.

The professional competence starts with the existence of the high quality clinical achievements, expressed in duly maintenance of the preventive educational service, diagnostically and effective therapeutically services in order to define and satisfy the patient's needs.

The importance of the expert's competence is asociated with a competent management necesity. The managers should be able to maintain the required norms and positions that are being in a rapid evolution and the economical pressures which demand a high competition of health establishments.

The introduction of a high technology equipment in the medical practice has led to the decrease of the medical personnel's pressure during the para-clinical investigation by a significant reduction of the investigation time and also by an effective increase of the results' accuracy.

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