THE ANALYSIS OF THE POPULATION HEALTH STATUS IN THE DEJ – GHERLA AREA: A QUALITATIVE STUDY

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Abstract: The aim of this study is to evaluate the health needs of a community using a qualitative method that is structured interview of professional from health care services. This study is a part of a comprehensive community health needs assessment that wants to emphasize the differences between different communities in the county. The data obtained in this study show that the qualitative research highlights particularities of the health state of a community, the risk factors and the health preconditions with an impact on the use of medical services.

Key words: qualitative research, health service needs and demand, health needs assessment, health priorities.

1. Introduction

More and more health systems consider that the implication of communities in the strategic healthcare services planning of a certain area brings benefits by directing the financial resources better there where a greater need arises, or where there is a deficit of any nature.

Globally taking into account the epidemiological stats of the population in a county, these are not completely relevant for the healthcare needs for each community, because the data differs in many aspects, such as: geographical particularities with implications on the environmental factors which influence said population, the socio-economic and financial factors, customs regarding the

maintenance of health, dietary habits, the predominant work type, access to healthcare, the level of education etc. All these factors have significant influences on both the developed pathology in said community, and on the community's attitude towards disease and maintaining proper health [2].

Thus it becomes evident that a unitary planning of the healthcare services cannot be efficient, because of the differences regarding health needs and available resources in the communities.

The present study used the qualitative method to evaluate the health needs of a community, evaluating the perception of professional that offer medical services to said population, data collected from group interviews, by which the participants are

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asked to indicate the problems that they consider important for the studied community [4], [7]. The study wishes to represent the first part of a research evaluation of health needs in the communities from Dej, Gherla and adjacent rural establishments, meaning the part that brings the information regarding main health problems as seen through the eyes of doctors.

2. Material and method

The study consisted of making an evaluation of the health needs of the population located in the 2nd territorial planning unit of Cluj county, meaning Dej, Gherla and neighbouring establishments, with a total of 105.987 inhabitants of the county (15.55%), out of which 56.65% in the urban environment and 43.35% in the rural environment [9].

I have applied a qualitative method for the evaluation of the main health issues of the studied population, meaning the group interview [5]. In the evaluation of the health needs of the population in the Dej, Gherla and adjacent establishments area, two groups of doctors working in the region were made, all having different medical and surgical specializations. One group being consisted in 11 participants and the other one in 10, and the aspects relevant for the research being discussed, based on a structured interview.

The interview guide is as follows:

In order to assess the health needs of the community, please answer the following questions:

- 1. What do you think the problem with the greatest health impact on the population of the community (youth, adults and the elderly) is?
- 2. Which ethnic or social groups do you consider are the most vulnerable?
- 3. What is the most significant aspect of health, which is not necessarily a problem

now, but you think would be very important in the future?

- 4. What is the program of health or medical services that has the greatest positive impact in the community?
- 5. What do you think are the needs of health suppliers in the region (general practitioner, specialists in ambulatory or hospital etc.)?
- 6. What are your expectations from the policy makers in the health system (Ministry of Health, CNAS)?

At the end of discussions, the participants were given a prioritizing sheet of some problems regarding the health of the community in which they work, by the significance that the participants consider they have for the population of the community, with 10 being the most important, with the biggest impact on the population, and 0 the one with no impact.

The health issues listed in the prioritizing sheet were divided in three categories: conditions, behaviours and access to health services.

The qualitative data obtained from the structured interview was interpreted through a content analysis which represents a quantitative research technique of communication, applied with the purpose of identifying and objective and systematic describing of the manifest contents [1]. Thus out of the answers given by the participants and recorded in writing, similar expressions were identified and the number of their mentioning by the respondents was evaluated.

3. Results and discussions:

Following the analysis of answers given during the structured interview in the groups of doctors from the Dej, Gherla areas, the most expressed opinions were identified for each topic discussed by the participants.

3.1. The health problem with the biggest impact on the community

The most participants from the structured interview identified cardiovascular diseases as the issue with the highest level of impact (42.85%).

The second health issue identified by the doctors was diabetes and obesity, also underlining the tendency of age decrease in the disease debut (28.57%).

On the third place as frequency were the accidents, but also alcoholism and unhealthy dietary behaviours (19.04%).

Almost as frequently mentioned as alcoholism, the lack of sanitary education of the population is considered to have a significant impact on the state of health in the community (14.28%). Related to the lack of sanitary education, the social aspects such as the precarious socioeconomic status, or the high percentage of uninsured are considered to have a significant impact (9.52%), also the bureaucracy in the sanitary system (4.76%).

Other health problems mentioned in the discussions, but with only one mention are psychological diseases, BPOC, the late diagnosis of cancer.

3.2. Vulnerable population groups (social or ethnical)

Concerning the identification vulnerable groups in the interview administered to the professionals in the health domain, there has been an almost unanimous consensus in the nominalization of said groups. Thus old people have been identified as being the most vulnerable, by 76.19% of the participants.

The second identified vulnerable group is represented by the Roma population (47.61%), on a par with the group containing uninsured, unemployed and people with low income.

On the third place as frequency (28.75%) is the vulnerable group of children.

Other groups mentioned in the discussion, but just by one participant, are the women in the rural area and people with disabilities (4.76%).

3.3. The health aspect that can become important in the future

Regarding the establishment of the most significant health aspect, which isn't necessarily an issue in the present, but could have a strong impact on the health state of the community in the future, the answers given by the professionals were numerous and many aspects have been mentioned, without one particular subject to be mentioned by the majority of interviewed professionals.

However, the discussed aspects can be split into two main categories, factors regarding the health system and risk factors for the disorders. In both categories a hierarchy is looming.

Therefore, between the problems of the health system that are considered potentially threatening for community state of health, the first place is taken by the decrease of the medical personnel in the system (19.04%), caused on one side by the blockage of job vacancies from 2009 [10], followed by a partial unblock because of the laws in the following years [11], which led to a decrease in the total number of jobs in the system, and on the other side by the tendency of staff (both doctors, nurses caretaking) migration towards countries with a better salary. Thus, in the last five years, around 10000 doctors left Romania, and the number of departing doctors each year surpasses the one of medical graduates from the state universities [3]. Also, nurses caretaking personnel left the country in massive numbers, in search for better

wages [6]. Even though there is no official data regarding the exact number of medical assistants who left the country during the period of 2007-2008, 4608 (3.8% of the total numbers) nurses and midwives required a certificate of acknowledgement of their diploma in the EU [8].

On second place as a possible negative impact, is considered the large percentage of uninsured persons, with a precarious economic status (14.28%).

A small amount of participants to the structured interview considered the following factors as important for the future of the community health: negative publicity of the medical act, which is considered to be of poor quality, and the decreasing respect towards caregivers. In the same proportion, the insufficient development of preventive medicine was perceived as a threat, where even though there are prophylactic programs they are little known and insufficiently applied (9.52%).

Also, the precarious sanitary education is consider to also have an influence in the future on the health of the community (4.76%).

In the category of risk factors considered to be threatening the future health of the community, the majority of present doctors mentioned obesity and unhealthy diets. Initially, the two aspects were considered separately, but following the discussions they overlapped especially in their potential consequences (28.57%).

On second place, daily stress generated by the current lifestyle is considered to be potentially dangerous and with implications in the future (23.8%).

With a small number of mentions (9.52%) are drug consumption, aggressions and pollution, each mentioned only by one participant.

3.4. The health program with the biggest impact on the community

In the discussions when it came to the health program considered to have the biggest impact on the community, the first place was taken by the diabetes program (23.8%), not only because of the large number of beneficiaries, but also because of the high costs implied by the treatment of this chronic disease and by its complications.

With the same number of mentions are the prophylactic programs of vaccination, considered to have a large impact because of the large number of participants and because of the low costs compared to the benefits (23.8%).

Many participants to the structured interviews mentioned all the free programs as being significant in the community, without differentiating between them, considering that in a population with a precarious financial status any program which implies the copayment from the person cannot have the efficiency of a program financed from other sources (Ministry of Health, CNAS, local budget etc.) (19.04%).

Within the discussions were mentioned the following programs: the screening of cervical cancer and drug compensation (9.52%) and the programs for chronic diseases (TB), but with only one mention (4.76%).

3.5. The needs of health services suppliers in the region

Considering that a health system cannot function efficiently without a certain degree of satisfaction of the workers, we have tried in the interview to identify the needs of the health services suppliers in the studied community.

The main need identified by the majority of the participants is represented by a better pay of the medical staff, eventually according to their performance (76.91%).

A better endowment with medical equipment is a need mentioned by more than half of the participants (52.38%), as is the possibility of its renewal according to the development rate of the diagnosis possibilities in medicine.

On the third place as frequency of mentions is the necessity of communication improvement between all the categories of services suppliers, both in communication between the general practitioners, ambulatory and the hospital one, but also between different hospitals, especially with the institutes (38.09%).

The access to high performance investigations is perceived as "difficult" by a large number of participants, because of the sometimes difficult inter-institutional communication and also because of the high costs that limit their use, resulting in a necessity of implementing measures that would lead to an improvement of access to the high performance investigations (28.57%).

Other needs identified by some of the participants to the structured interviews (19.04%) are represented by the need of improvement in the work conditions and reduction of professional stress, by a better medical services financing program, especially by an increase in the services that can be contracted with the Insurance House and by improving the personnel policies, by unlocking job vacancies and increasing the number of nurses, but also of employees with higher education in the deficient specializations.

Some participants (14.28%) indicate the need of an easier access to training courses, by lowering their costs or the employer covering their cost.

Occasionally (4.76%) other needs of health suppliers were mentioned, such as organizing promotional health campaigns that would increase the population awareness, implementing medical practice guides in all specializations and the

elaboration of diagnosis and treatment protocols which would improve the quality of the medical act, the increase of the role of family medicine and making it more active, reducing the bureaucracy that hinders the unfolding of the medical act and consumes a lot of time from the specialists, respecting the professional's decisions by the patients by a better sanitary education for them.

3.6. The expectation from the policy makers in the health system (Ministry of Health, CNAS)

In the same line with identifying the needs of health services suppliers and partially overlapping those, their needs and expectations concerning the policy makers, such as the Ministry of Health and the National House for Health Insurance, were identified. Compared to the other aspects discussed in the structured interviews, more expectations were listed, which were then systematized in a few major groups.

Therefore, the main expectation mentioned by the majority of participants to the structured interviews was a better pay of the medical staff (76.19%).

As frequently mentioned were the improvement of personnel policy (by unlocking job vacancies, increasing the number of residency in deficient specializations and modifying the staff normative) and ensuring funding of the sanitary system, in particular the hospitals, similar to the one in the European Union (38.09%).

The third most frequent mention was the expectation that the Ministry of Health should be more involved in the endowment of hospitals, especially the medium and small, whose resources are scarcer than those of big hospitals, which already benefited from an appropriate endowment (33.33%).

A better appreciation of doctors by the policy makers, diminishing their bad press, is also a frequently mentioned expectation in the discussions (28.57%).

With the same amount of mentions were the expectations for the policy makers to manifest a larger legislative consistency, without frequent changes to the laws in force that makes it very difficult to know them and the extension of the range of prophylaxis programs developed with help from the Ministry of Health (23.8%).

With less mentions, but still considered by the participants, were the disappearance of politics influence in the system (14.28%) and, connected to this, taking action according to the concrete needs in the territory (9.52%), elaborating some different insurance packages and different service packages according to the quantum of contribution to the health insurance system (9.52%), and also

developing some education programs for the population (4.76%).

3.7. Prioritizing the main health issues in the community

At the end of discussions the participants were given a prioritization grid of the main health problems in the community in which they work, in order to elaborate a plan for strategic development of the medical services according to the main priorities identified.

In table 1 one can observe the mean and median of the points given by the participants to the 33 mentioned problems.

In order to prioritize the health problems, we have considered that the median is a much more useful indicator than the simple mean of points given by the participants for the impact they consider each issue has on the community.

Prioritizing the main health issues of the community

Table 1

No.	Problem	Mean	Median	
DISORDERS				
1.	Cardiovascular diseases	9.48	10	
2.	Cancer	7.52	8	
3.	Diabetes	7.43	7.71	
4.	Mental disorders	7.29	7	
5.	COPD and asthma	7.05	7	
6.	Neurological diseases	6.95	7	
7.	Accidents and injuries	6.29	6.64	
8.	Obesity	6.29	6.14	
9.	Digestive diseases	5.90	6	
10.	Drug addiction	3.90	3.95	
BEHAVIORS				
11.	Smoking	8.05	8.02	
12.	Deficient education, lack of basic sanitary knowledge	8.24	8	
13.	Excessive alcohol consumption	7.67	8	
14.	Breach of rules of hygiene	7.24	8	
15.	The conception that one goes to the doctor only when feeling	7.19	8	
	extremely ill			
16.	Lack of value for healthy behaviors	7.14	7.57	
17.	Failure of a healthy diet	7.48	7.24	
18.	Sedentariness	6.67	7	
19.	Chronically ill non-adherence to treatment	6.62	7	
20.	Excessive drug use without medical prescription	6.19	6	

ACCESS TO HEALTH SERVICES				
21.	Too high use of hospital services for minor issues	7.95	8.50	
22.	Insufficient prevention programs or insufficiently used	7.67	8	
23.	Lack of care systems for the elderly with low income	7.62	8	
24.	Lack of coordination between specialists and G.P.	7.29	8	
25.	Insufficient social welfare system	7.67	7.83	
26.	Too high costs for dental medicine	7.33	7.67	
27.	Too short program of general practitioners	7.48	7.24	
28.	Too few medical offices in the rural area	6.81	7	
29.	Lack of health insurance	6.43	7	
30.	Too long waiting time at the doctor	6.24	7	
31.	Additional and informal costs too high	6.14	7	
32.	Distance, lack of transportation or too high costs	5.90	5.95	
33.	Lack of information regarding existent medical services in the area	5.43	5.71	

As one can see from the above table, within the disorders, the main problem on the list is represented by the cardiovascular diseases, the median of the points given being 10, which represents a maximum (standard deviation=0.74).

On second place were the malignant tumors, with a median of 8 (standard deviation =1.8), and diabetes on third place, with a median of 7,71 (standard deviation =2.29).

Within the behaviours that influence the health state, on first place with the biggest impact on the community is smoking, with a median of 8.02 (standard deviation =1.96). At a very small difference, with a median of 8 are the excessive consumption of alcohol (standard deviation =2.1), breach of the hygiene rules (standard deviation =2.66), lack of basic sanitary education (standard deviation =1.7), and late arrival to the doctor (standard deviation =2.61). On third place, with a median of 7.57, is the lack of value for healthy behaviours (standard deviation =2.59).

Regarding the aspects referring to access to health services, the main issue is the high use of hospital services for minor problems, which could be treated in the ambulatory, with a median of 8.5 (standard deviation =2.26).

The second place, with a median of 8, belongs to the lack of communication between family doctors and specialists

(std.dev.=2.81), insufficient prevention programs or their insufficient use (std.dev.=2.37) and the insufficient development of healthcare for the elderly with low income (standard deviation =2.81).

On third place as importance was the insufficient development of the social welfare system, with a median of 7.83 (standard deviation =1.95).

4. Conclusions

- **4.1.** Cardiovascular diseases are considered by the participants to the study to be the most important health problem in the target population. Because of this, a bigger implication of the primary assistance in an earlier diagnosis of cardiovascular disorders is needed, by conducting a screening in the offices of family doctors for the early discovery of cardiovascular disorders, by measuring the blood pressure and recording an ECG.
- **4.2.** Highlighting some risk factors for diseases, such as obesity, smoking, sedentariness and an unhealthy diet, and implementing some sanitary education programs that would promote a healthy lifestyle and deliver information regarding these risk factors.
- **4.3.** Because of the highlight of preconditions for bad health, such as a lower educational level and precarious economic status that enhance the risk of

disease in the studied community, it becomes evident that in planning of the health services one must be mindful of these particularities.

- **4.4.** This study shows the need of granting importance to the planning of health care programs destined for the elderly, these being considered the most vulnerable group of the population.
- **4.5.** The data obtained in this study show that the qualitative research highlights particularities of the health state of a community, the risk factors and the health preconditions with an impact on the use of medical services. Thus, for better planning of the health services in the county and for better in-depth understanding of the characteristics of the community, the study should be extended and the results compared to those obtained from a quantitative research.

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References

- 1. Berelson, B.: Content analysis in communication research. New York, NY, US: Free Press, 1952.
- Brown, A.L., Mann, N.C., Daya, M., Goldberg. R., Meischke, H., Taylor, J., Smith, K., Osganian, S., Cooper, L.: Demographic, belief, and situational factors influencing the decision to utilize emergency medical services among chest pain patients. Rapid Early Action for Coronary Treatment (REACT) study. In: Circulation, 2000 Jul 11; 102(2): 173-8.
- 3. Dornescu, V., Manea, T.: Migrația medicilor români: dimensiuni socio-demografice (The migration of

- Romanian doctors: socio-demographic dimensions). In: Review of social economy III/1/2013:121-138.
- Mocean, F., Borzan, C.: Managementul Calității și Planificarea Strategică în Managementul Organizațional din Sănătate Publică (Quality Management and Strategic Planning in Organizational Management in Public Health). Cluj-Napoca. Alma Mater, 2003.
- 5. Mucchielli, A. (coord): Dicţionar al metodelor calitative în ştiinţele umane şi sociale (Dictionary of qualitative methods in the humanities and social sciences). Iași. Polirom Publishing House, 2002.
- 6. Rotilă, V., Celmare, L.: Consecințe ale migrației personalului medical din România. Punctul de vedere al managerilor din sistemul sanitar (Consequences of migration of medical personnel in Romania. Point of view of managers in the health system). In: Annals of the Lower Danube, Galați, fasc. XX, Sociologie, nr. 2, 2007, p. 217-228.
- 7. Vlădescu, C.: Sănătate Publică şi Management Sanitar (Public Health and Sanitary Management). Bucureşti. University Book, 2004.
- 8. Vlădescu, C., Olsavsky, V.: Migrația asistentelor medicale: cazul Romaniei (Migration of nurses: the case of Romania). In: Health Management 4/2009, p. 14-18.
- 9. *** Cluj County Council. *Development Strategy of Cluj County in the period 2007-2013*. http://www.cjcluj.ro/strategia-de-dezvoltare-a-judetului-cluj-2007-2013/.
- 10. *** OUG 34/2009 on the 2009 budget rectification and regulation of financial and fiscal measures. In: Monitorul Oficial nr. 249 / 2009.
- 11. *** OUG 47/2012 amending and supplementing certain acts and regulation of fiscal measures. In: Monitorul Oficial, Part I, nr. 635/6 sept.2012.