STUDY ON ACCESSIBILITY TO MEDICAL CARE IN BULGARIA – PATIENT’S OPINION

Darina Mineva
Headquarters of the National Health Insurance Fund, Sofia, Bulgaria, dariamineva@abv.bg

Abstract: Introduction: The current perception of accessibility to medical care implies a link between accessibility to medical care and quality of life, and focuses on studying patient opinion and assessing accessibility of medical care. The aim of the article is to investigate how patients understand access to medical care through their perception (expectations and attitudes) and what their assessment of access (perceptions of hospital presentation) in the particular situation of using a medical service, hospitalization, through their perception of access. Methods: Direct Anonymous Study of Hospitalized Patients. One component of the Hospital's offer - "Organizing and Internal Order - Accessibility to Allow Hospital Visitation", is assessed in two aspects: from the point of view of patients' accessibility to medical care, which is reflected in the importance and expectations of access and from the point of view of patient assessment for performance through medical service, hospitalization, access, expressed as presentation, performance or perception. Data are processed through a "Cross tabulation analysis" with a Chi-square test. Results: There is a statistically significant correlation between patient perceptions of access and assessment in medical service delivery, as well as a discrepancy between perceived accessibility and assessment of receiving this group of care A - lower expectations, more satisfaction, and group B - higher expectations for less satisfaction. Discussion: The Gap model to measure consumer satisfaction, is used. The difference between consumer expectations and consumer experience Individual needs are met with content from the elements of quality of life: employment, well-being, education, dimension and use of leisure and social activity, health. Conclusions: Discrepancy between patient understanding of accessibility to medical care and their assessment is mainly due to the degree of satisfaction of their individual needs in the context of quality of life. The relationship between patients' perceptions and expectations is due to the "individual needs" factor, and their level determines the well-being of the person, which implies that the nature of the "presentation of significance" is of a socio-psychological nature. A modified version of the "Gap" model was prepared, which was applied in the study, adding the new content - the quality of life in the "Individual Needs" section. Keywords: accessibility to medical care, quality of medical activity, quality of life, model Gap.

INTRODUCTION
The modern perception of accessibility to medical care defines it as an opportunity for patients to receive one regardless of their social status, well-being and a place of life. The definition implies a link between accessibility to medical care and the level of quality of life, whose main constituent element is health. This fact leads to the study of patients' opinion and assessment of the accessibility of medical care. The aim of the article is to examine how patients understand access to medical care through their perception (expectations and attitudes) and what their assessment of access (perceptions of hospital presentation) in the particular situation of using a medical service, hospitalization, through their perception of access.

METHOD
Through a direct anonymous questionnaire "Importance - presentation", the opinion of 153 hospitalized patients was examined in a hospital with inter-regional functions in Bulgaria. One component of the hospital's offer - "Organizing and internal order - accessibility to allow hospitalization in a timely manner", is assessed in two aspects: (1) in terms of patients' perception of accessibility of medical care, which is reflected in importance expectations of access, and (2) in terms of patient assessment for performance through the use of a medical service, in hospitalization, in terms of access, expressed as presentation, performance or perception. The importance of the service is assessed on a quadruple scale: "extremely important", "important", "less important" and "minor", and the presentation as "excellent", "good", "satisfactory" and "weak". Data is processed through a "Cross tabulation analysis" with a Chi-square test.

RESULTS
Two categories of variables were examined: (X) "Importance to access to medical care" and (W) "Presentation of access to medical care". At X, the average value is 1.47 at a confidence level of 1.33-1.61. For U, the average
value is 1.51, with a confidence interval of 1.35 - 1.67. The confidence intervals of the calculated mean values of the sample variables show that the average for each of these variables in the μ population falls within the range of these values (the intervals contain the true average of the population).

Table 1 presents the results of the survey "Achievement - achievement" with "Cross tabulation analysis". It is reported that $\chi^2_{EM} > \chi^2_{kr}$ (the empirical value of the criterion $\chi^2$ is greater than the critical value of criterion $\chi^2$, which gave grounds for assuming a statistically significant dependence between the two variables - "Importance to access to medical care" (W) "Presentation of access to medical care".

| Offer component: "Accessibility to allow hospitalization in time" | X Importance (expected) | Total |
|---------------------------------------------------------------|-------------------------|-------|
| Y Achievement / presentation (perceptions)                    | 1 extremely important   | 2 important |       |
| 1 excellent                                                  | Observed frequency      | 66    | 15   |
|                                                              | (43,1%)                 |       | (9,8%)|
|                                                              | Expected frequency      | 213   | 84,8 |
|                                                              |                         |       |      |
|                                                              | $\chi^2$                | 101,4 | 1,65 |
| 2 good                                                       | Observed frequency      | 15    | 51   |
|                                                              | (9,8%)                  |       | (33,3%)|
|                                                              | Expected frequency      | 77,6  | 30,9 |
|                                                              |                         |       |      |
|                                                              | $\chi^2$                | 1,6   | 13,07|
| 3 satisfactory                                               | Observed frequency      | 0     | 6    |
|                                                              | (0%)                    |       | (3,9%)|
|                                                              | Expected frequency      | 7,07  | 2,8  |
|                                                              |                         |       |      |
|                                                              | $\chi^2$                | -     | 3,65 |
| Total                                                        |                         | 81    | 72   |
|                                                              |                         | (52,9%)| (47,1%)|
|                                                              |                         |       | (100%)|

Table 1 Results of the "importance - achievement" survey with Cross tabulation analysis

In the analysis of the data from the questionnaire "Significance - Achievement" presented in Table 1 it was found that: 52.9% of the respondents identified the availability of hospital aid as excellent and 43.1% as good, only 3.9% satisfactory. Of importance is the opinion of two patient groups, designated Group A and Group B.

In group A, 9.8% identified access to the hospital as important and excellent as performance. In group B, 9.8% identified accessibility to the hospital as extremely important and good as performance (Figure 1).
In group A, 9.8% identified access to the hospital as important and excellent as performance. In group B, 9.8% identified accessibility to the hospital as extremely important and good as performance (Figure 1). In both cases, there is a mismatch between the perception of patients about the importance of accessibility to medical care and its availability when receiving hospital services. In group A – lower expectations, for greater satisfaction, and for group B – higher expectations for less satisfaction.

**DISCUSSION**

The contents of the study component of the hospital offer: "Organizing and internal order - accessibility to allow hospitalization in a timely manner" includes both the organization of medical care in the hospital itself and the organization of medical care in the health system and (or any is another medical practice). From the results of the "Importance - presentation" survey with Cross tabulation analysis, two main dependencies were identified:

- a statistically dependent relationship "importance - achievement" for access to medical care, (dependence between patients' perceptions and expectations and their perception - assessment in the performance of the medical service);
- a mismatch between the way patients understand accessibility to medical care and their judgment when receiving this help in hospitalization (implementation by the hospital).

The following question should be answered:

What is the inconsistency between the way patients understand accessibility to medical care and their assessment? And why is the dependence between patients' perceptions and expectations and what is the nature of the relationship "importance - presentation" or "expectation - perception"?

The dependence between the variables "Importance to access to medical care" and "Presentation of access to medical care" can be defined as a dependence between expectations and perceptions. Such dependence is described in the work of American researchers Parasuraman, Zeithamland Berry (1985 - 1988), known as Model Gap [2,5]. According to him, the service is considered to be a quality if there is no discrepancy between consumer expectations and perceptions.

Service users' expectations are formed by the three sources: past experience, personal needs, and mouth-to-mouth information. Therefore, the discrepancy between patients' expectations of accessibility to hospital services and their perceptions of receiving them, expressed by the variability of importance and presentation on the one hand, is an indicator of a lack of awareness and personal experience in their contacts with the health system and, on the other, insufficient knowledge of the patient's needs by the system itself (or lack of consumer orientation, which is a factor of insufficiency or lack of quality of medical activity), (Figure 2)

**Figure 2 Explanation of the Importance of Access to Medical Assistance and Presentation of Access to Medical Care through the Gap**

The Gap model provides the foundation for measuring consumer satisfaction by using the difference between consumer expectations and user experience, etc. "Satisfaction gap". The presentation of a hospital is designed in a market environment and depends on the extent to which the medical standards and the agreed activity are met. Of
the three factors influencing patient expectations, the most sensitive and unclear content is the "individual needs" factor.

If it comes to the notion of "Quality of life" as a degree of perception and sensibility of people or a group of people, satisfaction of their needs and the possibility of happiness and realization, individual needs fill with content the elements of quality of life: employment and working conditions; well-being (living conditions, income, costs, consumption, education and the degree of utilization of cultural assets, value and use of free time and social activity during leisure time.

Under ideal conditions, if the elements of quality of life as individual needs are optimally satisfied, patients' perception and expectations of access to the health system are high, with a correspondingly good representation of the health system, in particular the examined hospital, and thus good access to them.

CONSEQUENTS
1. There is statistical dependence between patients' perception of access to medical care and their assessment of access to medical care.
2. The inconsistency between how patients understand accessibility to medical care and their assessment is mainly due to the degree of satisfaction of their individual needs in the context of quality of life.
3. The relationship between patients' perceptions and expectations is due to the "individual needs" factor, and their level determines the well-being of the person, from which it follows that the nature of the relation "importance-presentation" has a social and psychological character.
4. Accessibility of medical care can be assessed through the methods of economic life - statistical methods, the ideal service model "Gap".

CONCLUSION
There is significant statistical dependence between patients' attitudes about the importance of accessibility to medical care and their assessment of availability. The data of low expectations, with great satisfaction, and high expectations with little satisfaction, show a poor level of quality of medical assistance with regard to its organization. Discrepancies are interpreted by one of the economic methods - the Gap model, which has been modified, and new content - the elements of quality of life - has been added in the" individual needs" section.

REFERENCES
Parasuraman, A., Zeithaml, V., Berri, L., (1985), "A conceptual model of service quality and its implications for future research", Journal of Marketing, Vol., 49 (Fall, P. 41 – 50); http://okb89.ru/index.php/78-territorialnaya-programma/95-pokazateli-dostupnosti-i-kachestva-meditinskoy-pomoshchi
Parasuraman, A., Zeithaml V., & Berry L., (1985), "A conceptual model of service quality and its implications for future research", Journal of Marketing, Vol., 49 (Fall, P. 41 – 50); http://www.chumakova.ru/model-of-service-quality-video
Parasuraman, A., Zeithaml V., & Berry L., (1985), "A conceptual model of service quality and its implications for future research", Journal of Marketing, Vol., 49 (Fall, P. 41 – 50); http://hrm.ru/db/hrm/Berry_Leonard/glossary.html