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THE ROLE OF SPACE IN MEDICAL BEHAVIOUR OF POPULATION. THE CASE OF WARSAW

Health state of population living within a given area is shaped primarily by 3 factors: (a) model of health-care behaviour of the population, (b) quality of the human life environment, (c) the health-care system quality level. Problems encompassed by the two latter spheres lie within the domain of interest of health geography. According to H. Picheral (1982), contradictions appearing in the definitions of illness and health find their reflection in the research directions of medical geography, so that one has geography of illnesses on the one hand, and the geography of health-care systems on the other. Within the framework of geography of health these two directions are being integrated. Such an integrated approach permits a regional analysis to be made, pertaning to the health state of population and the quality of its health-care system, as related to the components of the human life environment.

Problems touched upon in this text make it come under the heading of the health-care systems geography. The subject of the paper is the relationship between the geographical space, i.e. its organization in terms of saturation with health-care objects their capacities and physical accessibility, and the medical behaviour of population. The latter is used to denote the population movements in space meant to satisfy the health-related needs.

More precisely, it is of interest whether physical accessibility of medical premises is the main factor influencing the medical behaviour. Thus formulated problems should be considered within the context of (a) physical accessibility of premises, (b) economic accessibility of premises, (c) institutional and organizational limitations to accessibility, (d) concepts and preferences concerning the ways of satisfying the health-care needs.

In the present paper the results of studies conducted in chosen areas of Warsaw in 1985 have been utilized. Attention was concentrated on the accessibility of the dentists and general practitioners.

GENERAL INFORMATION ON THE ORGANIZATION OF HEALTH SERVICE

State provides medical care free to all insured citizens, i.e. approx. 98% of the population. They can make use of the all-accessible, social medical service. It must be emphasized, however, that there are in Poland special health care services, which are open only to some socio-professional groups (members of these groups can, naturally, make use of the general social medical services). These are the services directly subordinated to the ministers of: National Defence, Internal Affairs, Justice, as well as Communication and Transport. The group of limited accessibility services encompasses also those premises which are set up directly at the work places, factories, enterprises or institutions. They are meant to serve solely local employees and their families. Besides the generally accessible and special medical services there are other possibilities of obtaining medical aid: in the case of school children — with the school doctor (cost free), and, for any person — in a medical cooperative (paid service) or at a privately practising doctor (the most expensive medical service form).

Special attention should be paid to the fact that generally accessible medical service is provided according to certain districts. A patient is **„ascribed"** to a definite local district dispensary and that is where he should look for medical aid.

The district-based organization is valid for all the medical specializations. As the depth of specialization increases the area served usually increases as well, but the "ascription" or "assignment" rule is still observed. This rule does not apply to medical cooperatives and privately practising doctors.

The district organization is an essential factor shaping the medical behaviour of population. This organization limits the institutional accessibility of other health-care premises functioning within the generally accessible medical aid system. Even if a patient considers the quality of medical services provided in a given dispensary or clinic as being low, he cannot choose another one within the all-accessible health care system. The choice possibility appears together with the decision of making use of the paid medical services.

Evaluation of the medical space (space in which health-care needs can be satified) of Warsaw and Warsaw voivodship is, in comparison with other areas of Poland, quite high. Still, possibilities of satisfying health-care needs are within the area in question spatially differentiated to a considerable extent. The situation is worse in the voivodship zone, outside Warsaw itself, and also in new Warsaw quarters located on the outskirts of the town. Underdevelopment of social infrastructure in these

areas often causes that they are called "infrastructural deserts". The generally accessible health-care centres are scarce in these areas, and, simultaneously, the paid medical aid premises can be found only at large distances, since they are primarily located in the centre of the town.

In spite of differentiation of medical space in Warsaw it can be said that for the whole area of Warsaw location of the health-care centres influences to only a small extent the populations' health-care behaviour. This influence decreases with the worsening of the quality of generally accessible medical services and with the increase of socio-economic status and medical information of a hypothetical patient.

STUDY AREA

Empirical information meant for verification of the hypothesis forwarded was gathered in the field study carried out within 2 subareas of Warsaw. The first one was a residential quarter located in the Western part of town, bordering with the towns' administrative boundary ("Lazurowa" district). This particular housing quarter is an example of "infrastructural desert". The second area chosen was a residential quarter located in the central part of the town (a part of the Żoliborz subdivision), having good transport connections with other areas of town, well-equipped with the health-care system premises. Within both these areas there are centres offering free medical aid of a dentist and general practitioners. The time in which such a centre can be reached on foot is not greater than 15 minutes (i.e. the areas are within the 15-minutes isochrone). The main difference between the two districts stems from a too low capacity of the centre located in the „Lazurowa" district as compared to the needs existing there. Socio-professional and demographic population structures within the two areas are similar, with the „Lazurowa" district being slightly younger.

Qestions contained in the questionnaire used in the study concerned the following five issues: (1) residence address and respondents' characteristics, (2), manners in which the basic medical aid is made use of, (3) evaluation of the accessibility of medical aid centres and of its influence on the choices made, (4) preferences and concepts as to the health-care system, (5) evaluation of the quality of medical services and of its influence on the choices made.

CONCLUSIONS

The results obtained confirmed the hypothesis forwarded. It could be stated that the distance from home to location where medical service is asked for is not the main factor determining the medical behaviour of

population. The main determining factor is the quality of service. According to the opinions expressed in questionnaire responses, these service centres get higher evaluations in which there is a good actual accessibility, as measured by the overall time needed for a visit at a dentist or a general practitioner. It turns out that such actual accessibility of a district doctor is usually evaluated as being low. The main cause here is the time of waiting for the visit. This fact is especially visible in the „Lazurowa" district. Physical closeness of the health-care centre in this area does usually not play any role in the choice of the place where medical aid is in fact obtained.

Certainly, evaluations of the free medical care differ. They depend upon the age, health condition and educational level of a patient. It should also be emphasized that the feeling of adequate psychological contact of patient and doctor is an essential component of the overall evaluation. The so-called psychological accessibility has an important influence on the final evaluation of the actual accessibility.

In view of distances between job and residence locations and time losses resulting from them growing significance is attached to medical aid organized at the place of work. In spite of its more difficult physical accessibility, its actual accessibility is highly appraised, since this way of health-care provision makes it possible to spare a few hours in the daily time budget.

The analysis also indicates that in the case of both these areas the chosen actual location of medical care depends primarily upon the education level of the patient. Educational level shapes namely, to a large extent, the hierarchy of importance of needs and the preferred ways of satisfying them.

Doctor's location in space plays a significant role in the choice of the place of medical aid in case of only two population groups. The first one is constituted by elderly people having low economic status and low mobility, often with low level of education. Evaluation of the free medical care is very differentiated within this group, for along with very high evaluations there appear decidedly negative ones. The second group is composed primarily of young, non-professionally-working women, who are bringing up their children. Evaluation of the free services by members of this group is very low, but nevertheless they are making use of this form of health-care.

It can generally be stated that in the patient's choice of the place of actual medical care space is a passive category. Distance to a health-care centre may play a role only when the quality of services offered meets expectations.

With regard to mental images of the health-care provision, opinions suggest a wide disparity of possibilities of obtaining medical aid. According to this image, these disparities depend to a small degree upon the distance between the patient's residence and the health-care centre. Main influences are exerted by such factors as: affiliation to social groups which can make use of special medical services, informal contacts and connections and financial capacities (i.e. possibility of paying in a medical cooperative or for a private visit, or of expressing ones gratitude towards a doctor from the all-accessible health-care system).

These factors are at the same time considered as conditions for obtaining a high level of medical aid. Furthermore, it can be stated that these factors add to "shrinking" or "expansion" of the medical space owing to its subjective perception. Hence, it is not the allocation in space, but factors listed above that determine the boundaries of the area within which a given patient will seek medical aid.

REFERENCES

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