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Assessment by the Attending Physicians of Medical Care Organization at Diseases of the Circulatory System in the Far Eastern Federal District

ABSTRACT

This article presents a study of the attending physician's opinion about the availability and quality of medical care for cardiovascular diseases in the institutions of the Far East Region which is based on sociological research in the 2013-2015 (174 respondents). The local level of care had the largest share of negative assessments, the federal level received the maximum number of satisfaction rate ($p < 0.05$; CI: 95.0%). More than a third of physicians indicate the difficulties in patient diagnostic, almost half of the respondents recommend developing of preventive direction. Problems of patient rehabilitation and territorial remoteness were underestimated. The majority of respondents feels the need for additional information of the cardiovascular system diseases diagnostic and treatment, as well as endorses the idea of the appointment of advanced cardiology courses. Few respondents approve the new system of continuous education.

Keywords: availability and quality of medical care, the problems of medical care for cardiovascular diseases, a system of continuing medical education.

INTRODUCTION

According to some authors, the specialized medical care monitoring should include not only statistics data, but also consumer and other stakeholders satisfaction [1,4,6]. As the key to health care settings, patients often have no opportunity to compare the quality of services in the practical absence of a choice of services [3]. So, free access to all health services has a crucial importance for the citizens of the Far East Region (FER). Organization of health care services has a secondary importance. The professional quality of the staff and the results of care are in last place [2].

It becomes obvious that the choice of venue surveys and the composition of representative groups is crucial important for the organization of the study [7]. It seems that the assessment of the various aspects of health care services by physicians will allow approach more competent to the overall assessment of health care.

MATERIALS AND METHODS

We used materials of sociological research (174 respondents) in 2013-2015. Doctors practicing in different territorial regions of the FER were the object of study. Medical care for cardiovascular diseases (CVD) inquiry forming the FER became the subject of research. The poll

of doctors was conducted in the workplace, on thematic advanced courses and retraining through anonymous questionnaires. Inquiry form in accordance with official guidelines and legal documents included blocks of questions related to access to medical care, the quality of services and awareness of specialists under diagnosis and treatment of CVD¹. Respondents completed a questionnaire on their own, including the maximum possible number of closed questions and five-point scale of indicators assessment. Statistical processing was performed using Microsoft Excel Statistics package. Statistical significance was based on the results of reliability indices due to error of representativeness of intensive indicator and confidence intervals of the relative data of the universal set. Indicators were evaluated as valid at the level of statistical significance of $p < 0.05$ (CI: 95.0%).

The aim of this study was to investigate the opinion of doctors about the availability and quality of cardiovascular medical care in the FER, as well as identification of organization problems from the perspective of the attending physicians.

RESULTS

Doctors from 7 of 9 territorial subjects of the FER took part in this study. Men were presented 21.8% and women were 78.2% among the total number of respondents. Respondents of pre-retirement (51-60 years - 32.2%) and retirement (older than 60 years - 6.9%) age were the most numerous groups. Representatives of the regional institutions accounted for more than half of all respondents (51.7%), 41.4% ones were from the local institutions and 6.9% ones were from federal institutions. Physicians (39.0%) and cardiologists (21.8%) turned out the largest groups of responders. One-third of respondents had 1-9 years' medical experience (33.3%), a quarter of respondents (24.1%) had 30-39 years' experience in additional.

More than half of respondents (52.9%) did not have a competence category; the highest category was only in fifth (18.4%) of experts. Moreover, almost two thirds (71.3%) of respondents did not leave the FER for professional courses or retraining in their specialty.

All levels of CVD care in the FER received $\geq 2/3$ of positive responses (3-5 points) with the most of them ($82.8 \pm 2.9\%$) at the federal level (Table 1).

¹"On approval of the recommendations of the "Organization of the population opinion poll (survey) about satisfaction with the availability and quality of medical care in the implementation of compulsory health insurance": an Order of CHIFF from 29.05.2009 № 118.

Table 1

Satisfaction with the organization of care for CVD estimated by doctors in FER

The level of medical care	The care satisfaction scores					
	1	2	3	4	5	Difficult to answer
In local outpatient departments, %	6,9±1,9	9,2±2,2	44,2±3,8	28,7±3,4	3,4±1,4	6,9±1,9
in local therapeutic hospitals, %	3,4±1,4	9,2±2,2	27,6±3,4	39,1±3,7	10,3±2,3	10,3±2,3
in specialized therapeutic hospitals,%	-	1,2±0,8*	12±2,5	48,3±3,8	18,4±2,9	20,7±3,1
In cardiac surgery hospitals, %	2,3±1,1	3,4±1,4	9,2±2,2	35,6±3,6	27,6±3,4	21,8±3,1
in a center for cardiovascular surgery, %	-	1,2±0,8*	2,3±1,1	32,2±3,5	48,3±3,8	16,1±2,8

Note: $p < 0.05$ (CI: 95.0%); * $P < 0.05$

According to $47.2 \pm 3.8\%$ of the respondents, the state of medical care services for the CVD in the FER has the current level and only $11.5 \pm 2.4\%$ of them don't agree with it. Only a third of the respondents were satisfied with the care organization ($31.0 \pm 3.5\%$), the same amount of them ($29.9 \pm 3.5\%$) aren't satisfied with the situation. These issues have caused difficulties to answer for $41.4 \pm 3.7\%$ and $39.1 \pm 3.7\%$ of the respondents, respectively.

More than a third of physicians ($35.6 \pm 3.6\%$) indicated the difficulty with diagnostics. The ability of cardiac ultrasound in the workplace was available among $85.1 \pm 2.7\%$ of the respondents, vascular ultrasound was $67.8 \pm 3.5\%$ of cases and only $10.3 \pm 2.3\%$ of the respondents noticed the availability of transesophageal ultrasound. Exercise testing (treadmill, bicycle ergometry) was held almost half of the cases ($47.2 \pm 3.8\%$ against $41.4 \pm 3.7\%$ of cases this research is not carried out). The personnel problem concerned only $11.5 \pm 2.4\%$ of the respondents. The territorial (long distance) issue and the problem of rehabilitation and correction of treatment after surgery was marked only $2.3 \pm 1.1\%$ of the respondents; $4.6 \pm 1.6\%$ of them answered they had had no problems with this group of patients.

The majority of respondents ($62.1 \pm 3.7\%$) believed that since the opening of the Federal Center for Cardiovascular Surgery in Khabarovsk (FCCSKh) the quality of care has changed for the better. One-third of respondents could not answer this question ($33.3 \pm 3.6\%$).

Almost half of the respondents noted that to direct patients to FCCSKh for surgery was easier ($48.3 \pm 3.8\%$), than in the other institutions of the country and the FER. More than half of respondents ($50.6 \pm 3.8\%$) noticed that they have no problems with the direction of patients in FCCSKh for consultation or treatment. Half of $13.8 \pm 2.6\%$ of physicians, who had reported the organizational problems, noted long time of waiting surgery due to the insufficient of quotas for the region.

The need for new information on modern methods of diagnosis and treatment for CVD has increased to $64.4 \pm 3.6\%$ of cases since the functioning of the FCCSKh. The same respondents ($85.1 \pm 2.7\%$) approved an offer to direct physicians to advanced cardiology courses. More than half ($55.2 \pm 3.8\%$) of the respondents reacted negatively the introduction a system of continuing medical education, and a third of them ($29.9 \pm 3.5\%$) couldn't to answer the question. And only $14.9 \pm 2.7\%$ of respondents gave a positive review.

Among the proposals to reduce the mortality from CVD in the closed questions respondents noted: the development of preventive care ($44.8 \pm 3.8\%$), the development of the medical examination ($19.5 \pm 3.0\%$), the availability and timeliness of care ($10.4 \pm 2.3\%$), good diagnostic equipment and the availability of the diagnostics for the patients ($8.1 \pm 2.1\%$), preferential provision of medicines and improve the welfare and quality of life (both $3.5 \pm 1.4\%$). In order to improve the organization of the physicians in the pre-hospital stage of care responders proposed: to improve the qualifications of personnel in CVD and specialists training process – $23.0 \pm 3.2\%$; to improve staffing and eliminate their deficit - $16,1 \pm 2,8\%$; to support local service (including salary increase) - $10,4 \pm 2,3\%$; to conduct a valuation of the working time of a physician – $9.2 \pm 2.2\%$.

DISCUSSION

Each of the care levels for CVD in the FER have got not less than 2/3 of satisfactory comments, but only a third evaluated positively the organization of the care process as a whole (31.0%).

There is a clear dependence of the number of satisfactory and unsatisfactory ratings on the level of medical care: the local (outpatient and inpatient) level has got the largest share of negative evaluations and minimum positive ones with reverse proportion to the federal level (Table 1). Half of respondents sad that interaction with FCCSKh simplify the work with patients having a "surgical" pathology of the cardiovascular system. Only one seventh of the respondents (13.8%) indicated on the problems in cooperation with FCCSKh, which is considerably less than in the whole of the region (35.6%).

The territorial problem and the problem of rehabilitation of patients and correction of treatment after surgery are underestimated by the respondents (only 2.3% of the respondents), although it is the territorial issue is most closely linked to difficulties in diagnostics of these patients (the problem was noticed as leading 15 times more). It is possible that the solution of organizational problems seems to be too difficult for physicians. Thus, to discuss these issues with managers (health organizers) could be more competent.

Predominantly negative evaluation of the planned reforms (introduction of continuous medical education system), in the opinion of respondents, the system is not fully developed and there is not enough information about it. There were fears the destruction of the existing system of education on the background inefficiency of new one. The result of consideration of education as a problem and responsibility of the state like an employer is rejection of continuous education system. In addition, more than 85% of doctors indicated the need for new information on diagnosis and treatment of CVD, and more than a quarter of them (at least 27%), feeling this need, didn't take active measures to obtain information and new knowledge, which together with the general level of qualifications and conditions of the training process might also indicate indirectly the crisis of current education. However, the transition to new system of education may be one of the reasons for the significant reduction in the number of working pensioners, which could create with it an even greater shortage of personnel in health care [5].

CONCLUSIONS

It was noted a discrepancy between the degree of the doctors' assessment of satisfaction with medical care with CVD at the various levels (over 85%) and the organization of its process (31%). In most cases, the practitioner has difficulties in assessing organizational issues (territorial problem and the problem of rehabilitation of patients are clearly underestimated by respondents), which requires the involvement in research opinion of health organizers.

The examination of patients with CVD became the leading issue due to the lack of diagnostic equipment in most institutions of the FER, in physicians' opinion.

The process of medical care to patients with CVD should be systematized and easy applied to work of primary care, which requires access to new information on diagnosis and treatment of CVD, in particular on the thematic cardiology courses. The planned transition to a system of continuing education allows risks worsening the problem of staff shortages in health care.

REFERENCES

1. Vserossijskoe sociologicheskoe issledovanie mnenija naselenija o dostupnosti i kachestve medicinskoj pomoshhi [The All-Russian sociological study of public opinion on the accessibility and quality of medical care]. 2010 URL: <http://www.zdrav.ru/articles/practice/detail.php?ID=79106> (accessed in 11 December 2015). (In Russian).
2. Kirik Ju.V. Kapitonenko N.A. Organizacija i razvitie medicinskoj pomoshhi na Dal'nem Vostoke Rossii po dannym sociologicheskikh oprosov naselenija [Organization and development of medical care in the Russian Far East according to opinion polls]

- Tihookeanskij medicinskij zhurnal [Pacific Medical Journal]. 2015, № 1, pp. 51–55. (in Russian).
3. Kochkina N. N. Krasil'nikova M. D. Shishkin S. V. Dostupnost' i kachestvo medicinskoj pomoshhi v ocenkah naselenija [The availability and quality of medical care according to the population assessment] Moscow: Izd. domVyssheyshkolyekonomiki, 2015, 56 p. (in Russian).
 4. Medik V.A. Osipov A.M. Obshhestvennoe zdorov'e i zdravooohranenie: mediko-sociologicheskij analiz [Public health and health care: medical and sociological analysis]. Moscow: RIOR; INFRA-M, 2012, 358 p. (in Russian).
 5. Semenova T.V. Kupeeveva I.A., Son I.M. Nesvetailo N.Y. Danilov N.V. Gazheva A.V. [et al.] Kadrovyte resursy uchrezhdenij zdavooohranenija [Human resources for health care institutions]. Moscow, 2014, 80 p.
 6. Seregina I.F. Lindenbraten A.L. Grishina N.K. Rezul'taty sociologicheskogo issledovaniya mneniya naseleniya Rossijskoj Federacii o kachestve i dostupnosti medicinskoj pomoshhi [The results of sociological study of Russian population opinion on the quality and accessibility of medical care] Problemy sotsial'noy gigieny, zdavookhraneniya I istorii meditsiny. 2009, №5, pp. 3-7 (In Russian).
 7. Siburina T.A. Barskova G.N. Laktionova L.V. Metodicheskie podhody k issledovaniyu udovletvorennosti pacientov vysokotekhnologichnoj medicinskoj pomoshh'ju [Methodological approaches to the study of patient satisfaction with high-tech medical care] Sotsial'nye aspekty zdorov'ya naseleniya. 2013, № 1 (29), URL: <http://vestnik.mednet.ru/content/view/454/lang,ru/> (checked in 12 June 2015) (In Russian).

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