

## DEFECTS OF ORGANIZATION IN RENDERING MEDICAL AID

The defects of organization at the medical institution mean disturbance of rules, norms and order of rendering of medical aid. The number of organization defects in Uzbekistan increased from 20.42%, in 1999 to 25.46% in 2001 with gradual decrease to 19.9% in 2003 and 16.66%, in 2006 and gradual increase to 21.95% and 28.28% ( $P < 0.05$ ) in 2005 and 2008. Among the groups of essential defects of organization there were following: disturbance of transportation rules, lack of dispensary care, shortcomings in keeping medical documentation, etc.

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### Introduction

It was discussed that the defects of medical care (DMC) essence includes the defects of medical aid organization, diagnostic defects and defects of treatment (Islamov, 2010). Different studies described peculiarities of organizational defects in medical care. Pozdneev and Avzalova (2001) studied the defects in medical documentation keeping in treatment and preventive hospitals. Ermoshina (2005) featured the defects in organization of medical documentation in different specialties, particularly related to the work of dentists. This article places more focus on defects in medical care organization.

### Materials and methods

Material for this study includes inferences of forensic medicine committee (FMC) examinations regarding professional infringements of medical workers. These filed examinations were carried out in all 12 regions of Uzbekistan by central and regional forensic expertise bureaus of Uzbekistan Public Health Ministry during the period from 1999 to 2008. 2369 conclusions of the forensic committees' examinations regarding infringements of medical personnel of their professional responsibilities were scrutinized using questionnaires which included classification parameters made up by special computer program.

DMC cases were fixed in 49.4% (1171) of cases from total 2369 EFC prescribed findings. The 620 conclusion protocols and 147 statements of forensic examinations concerning cases of corpses and alive people were studied; other types of forensic documents - conclusions of histological, chemical investigations, etc. were studied. Analysis of EFC protocols were followed by further examination of primary medical documents - case histories, cards of ambulatory patients, delivery process accounts, histories of infants' development, children medical cards, records of the children's development, medical cards of abortions, cards from the ambulance calls, protocols of pathological examinations of dead bodies, and also the data of clinical tests, results of X-rays and other special examinations were studied.

There were other related documents concerning DMC facts studied - protocols of clinical and polyclinic-pathological conferences, statements of departmental investigations, instructions of health care institutions and regulatory authorities. For detailed study of DMC we had worked out the modification of the DMC classification proposed by Tomilin and Sosedko (2000). The classification takes account of specialties, nature of

defects, causes of their development, place of defect occurrence and also their influence to outcome. Statistic processing of the received figures was carried out by using the statistical analysis packet in Excel 2003 with calculation of average errors for the average arithmetic means ( $M \pm m$ ). The differences were also considered as reliable when  $0.01 \leq P \leq 0.05$ .

## Results and discussion

The organizational defects increased in total amount of DMC from 20.42% in 1999 to 25.46% in 2001, showed certain decreased fractions in 2003 (19.9%) and 2006 (16.66%), and certain increased fractions in 2005 (21.95%) and 2008 (28.28%). Among the organizational defects the infringement of transportation rules (6.29%), lacks in management of medical documentations (6.48%) and lacks in dispenser observation (5.79%) were the dominating ones ( $P < 0.05$ ).

With this the number of organization defects increased from 20.42%, in 1999 to 25.46% in 2001 with gradual decrease to 19.9% in 2003 and 16.66% in 2006 and gradual increase up to 21.95% and 28.28% ( $P < 0.05$ ) in 2005 and 2008. The following groups were among the essential organization defects: 1) disturbance of transportation rules - 6.3%; 2) lack of dispensary care - 5.8%; 3) shortcomings in keeping medical documentation - 6.5 %; 4) others - 3.3%.

There are definite rules for transportation of patients with definite diseases. Disturbances of transportation rules directly affect the patients' health and result in development of different unfavorable outcomes, such as impairment of patient's general condition, development of different types of complications and even lethal outcome.

In medical practice of obstetricians and gynecologists 19.0%, infringements of transportation rules were mainly presented by unreasonable moving of patients from one medical prophylactic institution to another; moving of untransportable patients from one department to the other. In some cases these violations might appear as unmotivated refusal to hospitalize a patient or late hospitalization. 14.0% of organization defects among surgeons were early discharging of patients from hospital or transferring of untransportable patients to the other institutions, underestimation of patient's severe condition during transportation. 12.0% of organizational defects among pediatricians were early discharges of patients from hospital, refusal in hospitalization, transfer to the other medical institution, unmotivated leaving patients at home though they needed transportation. 8.0% of the defects among traumatologists were disturbances of rules in fixation of extremities fractures during transportation, early discharge from hospital, late referring for hospitalization. 10.0% of organizational defects in emergency medical care (EMC) services represented unmotivated refusal in hospitalization, unreasonable leaving patients at home or in the street, disturbance of transportation rules of patients with severe or combined trauma, with cardiovascular or respiratory diseases, endocrine pathology, obstetric pathology.

Example 1. FMC conclusion No29, 2005. 45 years old man was found by ambulance physician in alcohol drunk conditions and with body injures. Without any physical examination, the man was taken to house. The patient during 13 days was in severe condition in his house and then in highly severe condition he was hospitalized to hospital. He was examined by neurosurgeon who excluded the brain trauma and only in 4 days the neurosurgeon performed the neurosurgical operation for resection trepanation of skull. Next day the patient died. If patient was hospitalized and treated on time neurosurgeons, could have the opportunity to save his life. In this example, we could see the careless attitude to patient by medical personnel.

The deficits in dispenser observation were determined ( $P < 0.05$ ) in medical activities of obstetricians-gynecologists (64.1%), pediatricians (17.4%), therapists (10.9%) and nurses (2.2%). Insufficient dispenser observation in practice of obstetricians and gynecologists included irregular follow up of pregnant women, improper medical observation of women after giving birth and having pathology in pregnancy, insufficient treatment or absence of treatment of diseases of pregnant women (especially with

significant concomitant diseases and their complications). Pediatricians had irregular follow up of children, improper medical observation of children in a risk group, absence of home nursing of children with chronic diseases, disturbance of inoculation calendar, carrying out inoculations at home. Therapists had late records of patients with different pathology, improper observation of patients receiving home treatment, absence of observation of follow-up patients with chronic diseases.

Example 2. FMC Conclusion No 26-2001. Female patient of 22 years old was hospitalized into the delivery department of hospital where she underwent artificial delivery. Next day the hemorrhage developed. Her condition was worsening and in two days extirpation was performed. In spite of the performed medical measures she died in 2 days. The death was caused by acute cardiovascular, respiratory and renal insufficiency. There was DVS-syndrome and gestosis, developed on the background of chronic pyelonephritis and chronic anemia she was suffering from during pregnancy. There was lack of dispensary observation (timely hospitalization and treatment were not carried out in the out-patient department).

Insufficiency in keeping medical documentation, differentiated by the features, composed a large group (103 observations) of DMC. Obstetricians and gynecologists had 21 (20.4%) cases of careless registration of case-reports, ambulatory cards, records' correction in case-reports and ambulatory cards, absence of well-founded diagnoses, absence of data about the course of pregnancy, deliveries, post-delivery condition, absence of data about the name and the process of operative intervention, incorrect registration of patient's refusal to undergo medical interference, absence of patient's written consent to undergo medical interference, absence of stage epicrises in the case reports, defects of discharge epicrises.

In medical practice of surgeons 15 (14.6%) there were insufficiencies in registration of case reports, abbreviations in registration notes in case-reports, absence of well-founded diagnosis, lack of information in the diaries, absence of well-founded indications to medical interference, inaccurate defining of the operation types, absence of a patient's written consent to undergo the operation, incorrect registration of patient's refusal to undergo medical interference, either short description of the course of the operation or its absence, insufficiencies of records of instrumental methods of investigation results, absence of stage epicrises information, defects of epicrises on discharge. Among pediatricians 8 (7.8%) there were insufficiencies in registration of case-reports, ambulatory cards, absence of clinical and final diagnosis, short description of anamnesis of the disease in case-reports, ambulatory cards, absence of well-founded diagnosis, absence of information in the diaries, incorrect registration of patient's refusal to undergo medical interference, insufficiencies in records of laboratory and instrumental methods of investigation results, absence of stage epicrises in case-reports, insufficiencies of epicrises on discharge.

Example 3. FMC conclusion No 49-2001. 40 years old male patient had bodily injuries as a result of assault. He was hospitalized the next day in the emergency department of hospital. After medical examination physicians made the following diagnosis: closed craniocerebral trauma, fracture of the right temporal bone with penetration to sphenoid bone, epidural hematoma. The relatives categorically rejected operative interference. Conservative treatment was carried out. But lethal outcome was recorded in few days. The refusal of the patient and his relatives to undergo the operative interference was not registered in the case report.

Organization defects were often observed in medical practice of other specialists. Examination of physicians practice in Medical-Labor Expert Commission (MLEC) revealed incorrect evaluation of professional and general ability to work and, correspondingly, improper determination of invalidity. Pathologists made defects in postmortem examination, in proper keeping of corpses and biopsy material; they made mistakes in incorrect determination of death cause, defining cause-effect relation between pathology and lethal outcome. Pediatricians had cases of absence of or insufficient treatment of sick children from a risk group, absence of rendering medical assistance to patients, application of conservative treatment instead of necessary operative interference. Therapists had following medical defects: absence of medical assistance to patients,

insufficient treatment of patients, using home health treatment. The surgeons also had cases with insufficient treatment of patients with pathology and expectant tactics instead of urgent operative interference, absence of dynamic observation.

## Conclusion

Thus, organization defects in rendering medical aid to the population occupies a certain place among other defects. Insufficiencies in registration of medical documentation and disturbances of transportation rules are among dominant organizational defects. Insufficiencies in dispensary care are more often noticed in medical practice of obstetricians and gynecologists, pediatricians and therapists.

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