

**P. F. Dudka¹, A. V. Vershyhora², I. P. Tarchenko¹,
D. V. Dobryanskiy¹, N. M. Reznikova¹**

¹ O. Bohomolets National Medical University

² Center of Emergency Medical Service and Disaster Medicine in Kyiv

Providing emergency care in the world and Ukraine (historical aspects)

Key words: *emergency conditions, emergency medical service, history of medicine, Society of Doctors, Kyiv.*

Allergology is a comparatively «young» medical science. The term «allergology» appeared in the beginning of XX century. It was invented by an Austrian pediatrician Clemenceau Perks in 1906, when he noticed that some children had unusual reactions after injection of antidiaphoretic *serum*. The scientist called this phenomenon «allergy» (from two Greek words «allos» – «other» and «ergia» – «ability to act»). But it is clear that it does not apply to allergic diseases, but only to the beginning of the period when it was an adequate understanding of the nature of the problem. For example, there is hardly a disease and an idea of what treatment approaches, which have undergone such evolution, as happened with bronchial asthma (BA).

People have been facing symptoms of allergic diseases for a long time. Probably from fulminant form of allergic shock pharaoh Menes died in 2540 BC (also more common dating c. 3050 BC) – the first ruler of ancient Egypt, after he was bitten by a wasp. And in papyrus, which dated from about 1600 BC, there is a fairly accurate description of asthma clinic.

One of the first who described the allergy was Hippocrates. In the V century BC, he described skin rashes and digestive disorders that appeared in patients after eating certain foods. The introduction of the term «asthma» which in Greek means «heavy breathing» is also attributed to Hippocrates. In his works there are indications that asthma is spastic and causes of dyspnea are humidity and cold. Galen described allergic rhinitis in the II century BC, – one of his contemporaries sniffed a rose, he began to sneeze strained. About after millennium the world famous Arab physician Avicenna began study allergies. His discovery was the «spring runny nose» that appeared during flowering of herbs. Avicenna suggested ingestion of shilajit and smear of nose to treat this type of allergy.

The first important information about the nature of asthma was discovered in the 80s of XIX century, when

P. Ehrlich described eosinophils and basophils. Muller, P. Ehrlich's student, discovered eosinophils in the sputum of patients with asthma and this cells were called Ehrlich's cells. Subsequently, Leiden and Charcot described the decomposition products of eosinophils, which were named crystals Charcot – Leyden.

By the end of the XIX and early XX century theories were formed, that were an attempt to explain the origins of asthma: there are convulsive reflex (theory of neurosis), intoxication and theory of bronchial spasm. Assumptions about the origin of allergic asthma were announced by doctors E. O. Manoylov (1912) and N.F. Golubov (1915), which drew attention to the fact that the mechanism of development of asthma resembles anaphylaxis.

It is interesting to trace the evolution of treatment of asthma by the example of famous people who suffered from it. Charles Dickens (1812-1870) treated asthma by opium, it was the conventional method at that time. The French writer M. Proust (1871-1922) drank cold beer as a medicine. Theodore Roosevelt (1858-1919) treated asthma only by herbal tea. Cuban Revolutionary Army Commandant Ernesto Che Guevara (1928-1967) had been a doctor before the revolutionary events and had worked at the Institute of Allergology. One of the first words that Ernesto Che Guevara began to speak was the word «injection» because severe asthma attacks were treated by injections of adrenaline.

Today significant progress in the study and treatment of asthma has achieved. Thus, important point in the implementation of treatment of BA especially during seasonal exacerbation or attack of asthma is ability to deliver drugs directly to «locus morbi». Therefore, in case of the provision of urgent and emergency care the usage of nebulizer therapy is increasing (from the Latin. Nebula – fog, cloud) which is known since 1859 (J. Sales-Girons, Paris).

Today Ambulance in Ukraine is equipped with modern equipment for oxygen therapy and mechanical ventilation, nebulizer therapy is implemented, that is especially important in providing of medical care in children and can deliver high doses of inhaled corticosteroids and β_2 - agonists during aggravation of asthma and COPD

They are our angels - the guards, the white cars with blue snowflakes like on wings, fly toward the adversity that occur in the whirlwind of difficult nowadays. These bright snowflakes symbolize the rays of our lives that need help. Bright cornflower lights is blinking, siren so familiar to us is tearing the air, for a brief moment turning from the ghosts of routine, warning that everything that surrounds us is an illusion which could disappear at any moment. There is something very real in these sirens and rapid movement of white cars with blue snowflakes among colorful stream of cars. Perhaps this is the only reality in the maze fate of each of us.

So, our further story will be about the pages of history of emergency medical service (EMS) – the

service, which has long way of development. Historians remember the first attempts to provide emergency medical service by Egyptian priests who laid on palm's leaves on fractures of limbs for immobilization. Hippocrates described the methods of first aid in traumatic injuries and others.

In the Middle Ages there is the first written mention about the creation of the service, which provided medical aid for wounded and sick Christians soldiers, when there was fierce war between Crusaders and forces of Muslim's leader sultan Saladin. In that time, in the East, the prototype of the future emergency medicine service appeared in the world [1, 2, 3].

The first were «Hospitallers»

In the middle of XI century according to various sources in 1048 or 1070 one of the Italian merchant's seaside town – Amalfi Republic, located in the south of Naples, has received permission to open hospital in Jerusalem near the site of the Holy Sepulcher. Hospital was provided the name of John the Baptist. A small brotherhood of monks gathered soon, which cared after the sick and wounded pilgrims who came from Europe. And the hospital has become a large monastery. Later a large new hospital was built there. The first monks were called the Hospitallers or Ioannites. In 1099 Ioannites Brotherhood was transformed to the order [1, 2].

Rescue Service in 16-18 centuries

In 1767 in Antwerp, Hamburg, Paris Society providing assistance to victims appeared. In these cities rescue points were built where volunteers brought victims. Unfortunately, this initiative was not developed, and it revived only in the second half of the XIX century.

In New York Emergency medical service has started functioning in 1868. The American EMS station, beginning with New York, was built mainly in hospitals. and had a department with beds for those who need further treatment after providing first aid.



Photo 1. Van of emergency medical service was created by Ford in America, 19th century

After receiving information about an accident, the station sent out nurses to the scene. The nurses called doctor by phone if necessary.

This type of stations existed in Spain, even in small towns. EMS «Ambulances Urbaines» appeared in Paris. They existed at the expense of the city administration and mainly transported the patients to the hospital or home. [3]

Later, July 10, 1877, in the UK under the mediation of the Order of St. John Association of St. John emergency care was founded.

EMS appeared in London in 1878. Then the Society «St. John Ambulans Association» was founded. At the Society's main station were warehouses of apothecary and dressing which required for providing first medical aid. The Society had departments in many cities in England, and in cities with population over 100,000 people doctors came to the scene with nurses. In cities with populations less than 100,000 people only nurses provided first medical aid.

German Societies «Samariter-Verein» appeared from the initiative of Professor F. A. von Esmarch [3].

The first such Society appeared in 1881 in the Kiel city. Within a short period the number of Societies began to grow. Most of them performed mission of training of first aid for sudden accidents before the arrival of the doctor. Samaritan School, where doctors gave lectures on anatomy, physiology and first medical aid were created. [3]

Department of St. John emergency medical service was opened in Canada (Quebec) in 1883. Soon first medical aid courses began to work in Kingston, Ontario. Over the next 10 years, the Canadian organization grew to national scope and in 1892 it had 12 branches.

In 1891 permission to establish department of the Association of St. John emergency medical service in Western Australia was given. The basics of first medical aid have been being studied in the Australian mining towns, schools since 1911.

Mahatma Gandhi was St. the predictor of John's movement in India. In 1899 he formed a corps of emergency medical service which took part in the Second Boer War.

Vienna's emergency medical service station

There was a big fire in the Vienna Theatre of comic opera In 1881, during which a lot of people was affected. The



Photo 2. Vienna's sanitarian transport in the 19th century

city had a lot of equipped clinics, but when this misfortune happened, many people could not get medical help over the day.

300 patients with burns were lying near the walls of the theater and no one could come to help. 479 people were dead. The next day, the Viennese physician J. Mundi addressed to patron G. Vilchak with a proposal to organize a «Society of emergency medicine doctors.» Soon, in 1881, the «Voluntary Society of Salvation» appeared. In that time the questions arose in front of Vienna's magistrate: how to organize first aid at the scene, who should deal with the evacuation of victims. The world famous Vienna EMS station has been established to solve such problems. [5].

The own premise for the «Voluntary Society of Salvation» was built in 1889. There was a room for the senior doctor and the doctor on duty, a library with reading room, a room for admissions, offices, pharmacies, halls for meetings of Society, giving courses of first medical aid for private persons, police and others. 14 doctors worked on the station, five physicians were on duty at the same time. Vienna's sanitarian transport was horse (photo 2). They came to the closest cities near Vienna, also they had its own car on one of the train stations of Vienna. Success of stations exceeded all expectations. Soon the EMS stations that modeled on the Viennese appeared in many European cities – such as Bordeaux, Munich and others.

In the early 20th EMS stations were opened in Ukraine: Kiev, Odessa, Kharkov and other cities.

The origin of the EMS in Kiev

The origin of the EMS in Kiev can be attributed to the 1881. Inpatient care provided in the university, departmental or private clinics at the time.

At the initiative of «Kyiv Society of Doctors» «The Club of Doctors for Medical Duty», chaired by famous physician F. G. Yanovsky, who was one of the founders of Kiev tuberculosis institute (now National institute of phthysiology and pulmonology named after F. G. Yanovsky NAMS of Ukraine), and served as a consultant and chairman of the Academic Council was organized [16]. In 1881 an honorary member of the organization Professor Y. I. Matzon (from 1870 to 1883 he headed the Kiev unit of the Red Cross) proposed to open in the city EMS station. Soon the station opened its doors. It was placed on the Khreshatyk Street,

18, the house where the City Council met [15]. About twenty doctors worked on a voluntary basis here (photo 3). Activity of station was predominantly philanthropic in nature. Help in case of accidents and injuries was provided free of charge, and the visits was paid.

Gradually, the number of visits were increasing, and after some time the emergency medical service was not able to satisfy the growing needs of Kiev. Also, some doctors refused from non-profit calls and others dismissed.

So, there was the problem of organization of full service. Thus, in 1884 the «Society of emergency medical service», which had its statute that approved by the Ministry of Interior, was founded. The first chairman was the Mayor V. Protsenko.

The new organization included founders, patrons, honor, life and full members and, in fact, employees of university: they are professors K. Wagner, V. Vysokovych M. Obolonskiy, Sikorsky, K. Tritshel A. Abrahamson, L. Brodsky and other [11].

The Society made great efforts to ensure that on June 30, 1902 began working Kiev station of EMS (first rescue). It functioned on money that collected at charity evenings, donations and allocations of Kyiv City Council. The initiator of the opening EMS station was a public figure, Professor K. Modzelevskyy. This service was housed in cramped and unsuitable areas of the house in the Pirogova Str. 6. The house did not preserve to the present days, but today this territory has another one (photo 4). There were reception,



Photo 3. City Duma building. Khreshchatyk Street, 18. EMS department worked on the third floor. Picture, 1883



Photo 4. Pirogova, Street, 6. The house was built on the site of the destroyed first EMS station in Kiev, which functioned in 1902-1907



**Photo 5. Rescue station
(Pirogova street, 6), 1902**

doctor's room, dressing room, clinic, pharmacy, office, etc.

The first head was a doctor E. F. Hnus [4]. In open day station had two Austrian horse carriages purchased on donations of known philanthropists Tereshchenko M., A. Abramson, V. V. Kontovta and Kiev cyclists – amateurs. Six horses were bought for trips. Each carriage was equipped with two boxes:

one kept surgical instruments, bandages, medication, another had antidotes. Carriages were also equipped with oxygen pillow, headrest, hand-barrow and other. In case of massive injuries dressings, fire masks, tires kept for each carriage at the station. In 1909 2nd Kiev Artel Exchange gave to station carriage- Lando for transport patients from the railway station in the city. [4]

There were supplies of drugs, locker for disinfection by formalin, autoclave, dry sterilizer in station's pharmacy. In station's ambulatory first aid to victims provided (photo 5).

The staff of the station at that time consisted of doctoral staff (head and 8 regular doctors), 5 nurses, 3 cabs, janitor, courier and housekeeper. Two doctors were on duty daily from 9 am to 23 pm.

One doctor was on duty at night. Constantly during any weather one horse carriage was at the station, which in 1-2 minutes after the request for assistance traveled to the challenge (photo 6). It took place just another carriage. In case of fire with a large number of victims additional medical equipment was involved and all the staff of the station was convened. Within 6 months in 1902 the station had performed 2,006 interventions.

According to the statute Society aimed to provide free emergency medical assistance in case of accidents and sudden illnesses that occurred in the streets of the Kyiv, in all public places and at working places and provided such assistance for residents of private houses, but only if it was the threat to the life of the patient. In other cases, services of rescue station could be used for a fee (10 rubles for transportation), but contagious patients were not served at all. One rule was interesting: for delivering to the station the victim had to call a policeman or guard, or janitor who had to take the patient to the rescue station, from which they had no right to give up [11, 12].

Carriages went to help with severe injuries, accidents and sudden illness that occurred within 1-2 hours after treatment or when the patient's condition is not allowed to deliver in hospital in conventional transport [13].

The station received an increasing recognition from the residents of the city, but costs for its operation were lacking. To support the work carried out charity performances were given calendars, address books and reference, produced art stamps, postcards. «Ladies Committee» was



**Photo 6. Carriages of rescue station
in Kiev (Pirogova street, 6), 1902**



**Photo 7. EMS station at its location
on the Vladimir street, 33 (1907-1912)**



**Photo 8. House of Emergency Medical
Service (Reitarska street, 22). 2016**

created, it organized dances, evenings of «Cabaret,» proceeds from which went to the EMS station needs.

Finances was improved thanks to the help of famous philanthropists L. Brodsky, brothers Tereshchenko, S. Mohylotseva, married couple Popov and others. It made possible to buy the farmstead down the Vladimir street, 33, where in 1907 the station moved from the premises in the. Pirogova street, 6 (photo 7). Manor belonged to Professor G. Rhine [11].

Mr. Rhine worked in Kyiv St. Vladimir University, but later was transferred to St. Petersburg. His estate in Kyiv was handed in the disposal of «Society of emergency medical service.»

But the staff was not able to stay long here because land was small. Therefore, in 1913 it exchanged for the estate in the Reitarska street, 22. Station was transferred temporarily to the Novo-Pavlivska street (now G. Kotsyubinskogo). The construction of a new EMS station began.

A contest for the best facade of Hospital was announced. The project of the famous Kiev architect J. Zektsera won, it was designed in the spirit of the Florentine Renaissance. Thinly drawn facade was decorated with lilies – the symbol of Florence, and six-pointed star, which at that time served as a common emblem of EMS. On the ground floor 15 rooms for doctors, patients, pharmacies and other service needs were supposed. Design and construction was carried out in the 1912-1914 (Photo 8). The station began working.

The house of EMS in Reyterska street, 22, remembers the great M. Amosov.

Follow-story of house in Reyterska street, 22 is interesting. After the war there was a Ministry of Health and EMS station.

In Soviet times famous doctors worked there. Since 1953, therapy department headed by MD, professor E.I. Liechtenstein, and surgical department, which was on the base of Thoracic Surgery Institute of improvement of doctors headed by MD, professor Amosov were opened.

On the 3rd floor windows of operating room is seen, where in 1955 Amosov made a unique surgery – he used general anesthesia during surgery on the heart. It had been done by no one in the Soviet Union by that time [13]. G. Horovenko with Amosov was at the beginning of lung surgery, he could develop it into an independent scientific and practical direction, which is a foreground in the national health care system to this day [18].

There were outstanding scientists in the hospital: MD, professor O. M. Avilova, MD, professor I.P. Lerner, MD, Professor G. A. Dashtayants, d. MD, professor E. V. Andruschenko, MD, professor I. P. Dedkov.

Kiev EMS station in the early 20th

In 1913 the Society purchased on donations 4 cars and appealed to the City Council with a request to oblige all crews in city to exempt road for cars and carriages of EMS (previously it was concerned only fire brigades).

The First World War has begun and in August, 29 1914 surgical hospital in the main building of the station was opened. interest-free loan for 25 years of \$ 100 thousands karbovanets was given to the Society for replace the main building. But the station continued to work in the wing on the. Reitarska street, 22.

In wartime, the station was assigned additional tasks in transportation of wounded from sanitary cars. During the civil war and street fighting in the city, health workers of station were providing medical assistance actively to all injured (Photo 9).

Despite the devastation, unemployment, hunger and lack of adequate funding the EMS in Kiev continued to function.

In 1919 a decree about the nationalization of EMS station was published, but funding remained scarce. In this



Photo 9. Assistance to the victim, 1921

regard, the executive committee in 1923 allowed to collect donations among Kyiv residents and businesses to support the EMS, and payment for transportation of patients was collected also [4].

Popularity of EMS was constantly growing. In 1924 6,3 thousands visits were made, in 1933 – there were 16,5 thousands visits.

The first special brigades began to operate in pre-war years: in the first obstetric brigade was created in 1932, in 1934 – the first pediatric one.

In 1940 18 brigades worked on station every day 270 people were employed, of whom 49 were doctors. At the last pre-war years was made 53.8 thousand. Emergencies.

During the Nazi occupation EMS station was not working. Equipment, property, workshops, documentation were looted or destroyed. Only one room survived. After the liberation of Kyiv in 1943 the station had resumed its work. About 100 staff were killed during the war. Everything had to start from scratch. Doctors went on visits mostly on foot. Station staff consisted of only 9 people.

In the 1945-46 station received 11 trucks. Since 1948 sanitary cars GAZ-AA, and since 1953 – ZM and ZIS were given. In this difficult time for the Kiev station, in 1948 the team led by NA Lenhauer (photo 10).

Under her leadership, the station has become a leading institution not only in Kyiv, but throughout the former Soviet Union [14]. EMS substation appeared. The basis of the territorial public service laid for the radial principle that enabled effectively within 15 minutes to get to the patient. In March 1963 the station received a new building on the Lenina street, 37 b (today it is Bohdan Khmelnytsky). The building had 42 rooms, there were a conference room, library, dining room, garage, central dispatching equipped with the latest communication equipment.

To improve the quality of staff continuous training for medical personnel were planned. Doctors were trained, for example, at the base of the Kiev station first doctors were sent in Warsaw. There they worked for a month at the



Photo 10. N. A. Lenhauer (1908-1997)



Photo 11. Zilberman D.B. - the founder of STEB, 1961



Photo 12. House of Emergency Medical Service in the B. Khmelnytskyi street, 37 b (former Lenina Street, 37 b). «Center of emergency medical service and disaster medicine», 2016

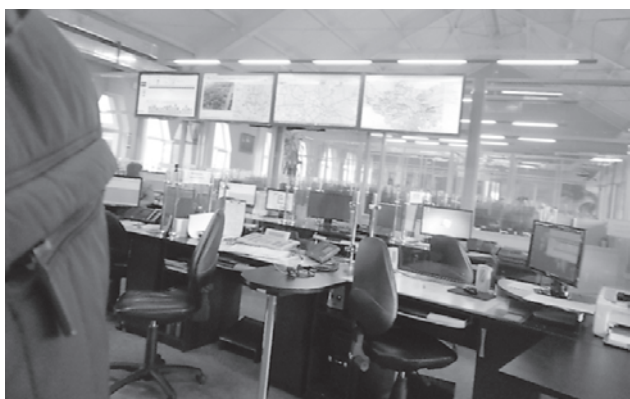


Photo 13. Dispatching Hall in «Center of emergency medical service and disaster medicine», 2016

station. Series of lectures that were read by experienced doctors of field brigades were organized. The skills of working with medical equipment, artificial respiration, external cardiac massage and others were perfected.

Mentoring was developed. Brigades received a breathing apparatus, defibrillator, electrocardiograph in 1961.

In Kiev EMS station continuously conducted the work on creation and development of specialized brigades. The first specialized brigade was established in 1956 and it was designed for acute care patients with acute mental disorder. In 1994 specialized psychiatric teams were separated from the station. In 1960 specialized antishock brigade began to operate. In 1984 antishock brigade was renamed

in traumatological, to which hematological, toxicological, children's resuscitation brigades were joined. In 2000 the brigade of intensive care and resuscitation appeared.

Since 1961 cardiac EMS has been developed. For the first time in Ukraine at the Kiev station a specialized thromboembolic brigade (STEB) was organized. D. B. Zilberman was its initiator and first head (photo 11). Famous professors of **National Scientific Center «M.D. STRAZHESKO INSTITUTE OF CARDIOLOGY», MAS OF UKRAINE** I. K. Slidzevska and N. A. Hvatua made a practical and methodological assistance in the organization of the EMS.

In 1984 STEB brigades were renamed in specialized cardiologic brigades and in 1996 as a specialized cardioreanimatological. There were neurological and pediatric teams also.

In 1975 the Kiev EMS station was headed by I.G. Usichenko. The construction of separate facilities for placement of substations was beginning. Since 1979 funds for the purchase of sanitary vehicles were got out. Sanitary vehicles were replaced on the car brand «RAF-977» and in 1997 – «Gazelle».

In 1979 at the Kiev station at the basics of traffic department the department of hospitalization for all medical institutions of the city, a help service for hospitalization of patients and line control were created. This department began to adjust schedules of hospitals on duty and offices urgent inpatient care.

In order to improve control of service electronic computers in its work were introduced. Since 1960 Kyiv EMS station was Republican, and since 1965 – All-Union School of innovative experience. Since 1989, the Kyiv city EMS station was headed by Honored Doctor of Ukraine Vershyhora A. Under his guidance, facilities EMS were reconstructed, dispatching hall equipped with modern equipment (photo 12, 13). To mark the 100th anniversary the museum indoors was opened, which exhibition tells about the historical past of the station.

Today EMS service in Kyiv has a large group of specialists, it created a park really fast «coaches» has built a great hospital in Bratislavka street and network of substations.

EMS station in Odessa

April 29, 1903 one of the first (in Russian Empire) EMS stations in Odessa began to work (photo 14).

Society of doctors of Odessa was at the roots of service that provided to population of Odessa emergency medical care, the head of which was known bacteriologist Y. Bardah. The organizing committee was headed by earl M. M. Tolstoy (photo 16). His mother countess A. G. Tolstoy helped him in the creation of emergency medical service for citizens of Odessa. The organizing committee of members of the Association of Odessa Doctors for arranging EMS station made the allocation of city council land.

Count Tolstoy carefully studied Viennese experience and delved in all of the details – even participated with the doctor on duty as a male nurse.

For the construction of the Odessa's station plant and purchase of equipment collecting donations was announced among the population. Count M. Tolstoy made himself the main patron and personally allocated 100 thousands gold rubles.

Finally, in April 29, 1903 Station was opened. Brigades consisted of doctor, two nurses and coachman. In the first



**Photo 14. House of EMS station
in Odessa. 1903**



**Photo 17. Building of EMS station
in Chervonozhovtneviy street, 41 in Kharkiv**



**Photo 15. Professor
Y. Bardah**



**Photo 16. Count
M. Tolstoy**

year the station had two coaches and five pairs of horses. Two brigades were on duty in daytime and one at night. Clinic began working, which provided medical care round the clock. In the first year here 2,400 people addressed for medical assistance.

«War and revolution, intervention and occupation, epidemics and disasters – no matter what happens with the country and Odessa, doctors, paramedics and drivers of Station served faithfully to his home town, served at the call of the heart» as assessed about EMS station work report in 1903-1905.

For 110 years specialized teams (pediatric, cardiac, neurological, psychiatric) on the station were created [6].

Emergency medical service in Kharkiv

Since September 1895 in Kharkiv section of doctor on duty in night time appeared, which later became the «Society of EMS». The EMS station was organized, which originally didn't have its own room. Rooms in the wing and space for the stables in the territory of the Alexander Hospital (now the 1st City Hospital) for dispatching service and staff were allocated. In June 3, 1912 ceremony of solemn laying of own home in Kontors'ka, 41 (now Chervonozhovtneva street, 41) occurred.

By 1914 Station in Kharkiv had in disposal two carriages with equestrian team, each had two horses.

There were clear rules to call the carriage, which were made by «Society of EMS.» Calls were made by the phone.

First aid was provided day and night in case of accidents or sudden illnesses that occurred with residents of the city

outside their apartments. Doctors have not traveled to infectious, psychiatric patients and drunk. In the apartments of citizens the carriage leaved in case of poisoning, asphyxiation, severe injuries, burns, suicide, traumatic injury and other. Carriage had come to call for 17 min during the day. In case of absence of carriage calls were not accepted.

The appearance of the carriage is described picturesquely. Along with the coachman two large male nurses sat, one of them held a lantern, which illuminated the street, another one held so-called hand-bell, the prototype of the modern siren. All vehicles gave way of road to physicians. Inside the carriage sat the doctor, there were couches and a box of medicines. Employees received clothing.

Today in Chervonozhovtneviy street, 41 in building that survived to our day, Office of Emergency Medical Service of Kharkiv City Clinical Hospital emergency and urgent medical care is located, 2008 (Photo 17).

Payment for the assistance was not required, regardless of the wealth of the patient.

City Administration allocated for the needs of the station 5-7 thousand rubles per year, but it was insufficient amount. Solving the problem of funding was putted into «EMS Association». It was organized by Professor I. M. Obolensky – the first Head of Therapy department (1877-1884) of Kharkov Medical Institute, which was established on the basis of therapeutic and surgical hospital clinics in the hospital of the Red Cross (photo 18).

At the initiative of the wife of Professor D. Obolensky Ms. Diyevery various charity events, such as «Day of purple flowers» were carried through. Large sum of money was collected.

Senior doctor of EMS station was M. O. Molochov, who was elected in January 1910.

He dreamed of his own hospital at the station, and when the First World War began, he organized a hospital for the sick and wounded. According to Molochov, it was



**Photo 18. Professor
I. Obolensky**



**Photo 19. EMS car,
1924**

important that the doctor of EMS could observe the treatment of patients and improve their skills.

In April 1919, according to the Decree of People's Commissars, station was nationalized, but a senior doctor was still Molochoy. In 1924 the car of mark «Lancia», which was reconstructed into sanitary car, was received (photo 19).

During The World War II the Germans completely looted station and banned its funding. Two weeks after the occupation station's staff gathered to decide how to organize work. They found the necessary materials and medicines, dressing materials, equipped clinic and mounted device for transporting patients.

After the war, development of EMS station was much quicker. Gradually staff of health workers were increased, base of technological means was developed. In the 1960s specialized teams began to operate. A network of city EMS substations was created.

Hospital of emergency medical service has been opened since June 1977. Permanent reforming of EMS service continues in our time [7, 8].

EMS in Dnipropetrovsk

In 1883 earthquake was in Katerinoslav (now Dnepropetrovsk). It coincided with the celebration, conducted by the governor of the city. It was the first organized medical assistance for mass lesions, which was headed by K. Rode.

In 1904 in Katerynoslav the «Society of emergency medical service» was founded. The chairman of the Council



**Photo 20. Modern Hospital of emergency medicine
in the Sverdlova street, 65, Dnipropetrovsk**

board was a doctor N. Oransky. Three doctors were working at that time. Service existed at the expense of donations or a small fee for provided care.

The first EMS station was in Katerynoslav's Avenue (Karl Marx Avenue). Special night shifts for doctors were organized, there were not doctors on duty in city hospital at that time. The clinic was operated on station, it was equipped by flat for Chiefs, a meeting hall, apartments for staff. Two horse carriages were at teams disposal. Visits were carried out only in case of accidents and suicide attempts.

In 1914 there were 162 doctors, but EMS remained unchanged at the level of 1904. After 1914 the number of doctors increased in 10 times. Only in 1937 full EMS station in Dnepropetrovsk was established. Stations were organized in the Leninsky and Zavodsky districts. The first post-war years were characterized by resumption of the EMS and the opening of departments of urgent care in large hospitals.

In late 1958 service of station received a new building in the Sverdlova street, 65, where today it is the central office. In the same house in 1959 a hospital with 100 beds was opened (photo 20). The central substation was organized, specialized teams were created. Reforming of the emergency medical service is carrying out continuously in our time [9, 10].

Note. The materials from museum of EMS used in the article. The authors would like to thank the veteran of the station, museum administrator D.P. Costin for his help in working in a museum.

Список літератури

1. [Електронний ресурс] Режим доступу: <http://ru.rfwiki.org/wiki/Госпитальеры>
2. [Електронний ресурс] Режим доступу: <http://www.hrono.ru/religia/katolik/gospital.php>
3. Коган, Н. Н. «История скорой помощи» 08/09/2013. [Електронний ресурс] Режим доступу: <http://www.science-techno.ru/nt/article/istoriya-«skoroi-pomoshchi»>.
4. Вершигора, А. В., Городченко, Л. І., Єригіна, В. Т., Набухотний, П. Ф., Костін, Д. П. Київській міській станції швидкої допомоги – 100 років. Видавництво «Основа», 2002. – 56 с.
5. Швидка медична допомога: український досвід та світові реалії. [Електронний ресурс] Режим доступу: <http://therapia.ua/>

References

1. Available from: <http://ru.rfwiki.org/wiki/Gospital'ery>
2. Available from: <http://www.hrono.ru/religia/katolik/gospital.php>
3. Kogan NN. «Istoriya skoroy pomoshchi» (History of ambulance). Available from: <http://www.science-techno.ru/nt/article/istoriya-«skoroi-pomoshchi»>
4. Vershigora AV, Gorodchenko LI, Erigina VT, Nabukhotniy PF, Kostin DP. Kiivs'kiy mis'kiy stantsii shvidkoї dopomogi – 100 rokiy (100 years of Kyiv ambulance station). Vidavnitstvo «Osnova»; 2002. 56 p.
5. Shvidka medichna dopomoga: ukrains'kiy dosvid ta svitovi realii (Ambulance: Ukrainian experience and global realities). Available from: <http://therapia.ua/therapia/2009/02/shvidka-medychna-dopomoha-svitovyy-dosvid-ta-ukrayinski-realiy>

therapia/2009/02/shvydka-medychna-dopomoha-svitovyy-dosvid-ta-ukrayinski-realiy

6. Отчет работы Одесской станции скорой помощи за 1903–1905 г.г. [Электронный ресурс] Режим доступа: <http://www.ambulance.odessa.ua/Istoriya.htm/>

7. Федак, Б. С., Забашта, В. Ф. Швидка допомога Харківщини: кроки історії та сьогодення. [Електронний ресурс] Режим доступу: <http://emergency.in.ua/history/323-st-4-18>

8. Стадник А. Скорая помощь Харькова: история. «Старый Харьков» [Электронный ресурс] Режим доступа: http://www.sq.com.ua/rus/news/obschestvo/01.03.2016/skoraya_pomosch/

9. Головний лікар КЗ «ДСШМД» ДОР». М. О. Стебельська. [Електронний ресурс] / М. Кальницький // Режим доступу: <http://emergency.in.ua/history>

10. [Електронний ресурс] Режим доступу: http://gorod.dp.ua/history/article_ru.php?article=1536

11. Юбилей Скорой. [Електронний ресурс] / В. Ковалинский // Режим доступу: <https://www.interesniy.kiev.ua/yubiley-skoroy/>

12. Швидка медична допомога в Києві. Вечірній Київ. № 77 (18969) 14.08.2012 р. [Електронний ресурс] / М. Кальницький // Режим доступу: <https://www.ua/18969/art/1349941890.html>

13. Карету мне. Газета по-киевски. [Електронний ресурс] / М. Кальницький // Режим доступу: <https://www.interesniy.kiev.ua/karetu-mne/>

14. Будни скорой помощи [Електронний ресурс] / О. Тоцкий // Режим доступу: <http://tov-tob.livejournal.com/80598.html>

15. [Електронний ресурс] / Режим доступу: https://uk.wikipedia.org/wiki/Будинок-Київської_думи#/media/File:Dum_sqr7.jpg

16. Девіз Феофіла Яновського – щонайближче до хворого [Електронний ресурс] Режим доступу: www.health-ua.org/archives/health/926.html

17. [Електронний ресурс] Режим доступу: https://ru.wikipedia.org/wiki/Зекцер_Иосиф_Абрамович

18. Фещенко, Ю. І. 90 років в ім'я життя. До ювілею Державної установи «Національний інститут фізіатрії і пульмонології ім. Ф. Г. Яновського НАМН України» [Текст] / Ю. І. Фещенко, В. М. Мельник, А. М. Приходько, Л. В. Ареф'єва // Укр. пульмонол. журн. – 2012. – № 3. – С. 14.

6. Otchet raboty Odesskoy stantsii skoroy pomoshchi za 1903–1905 g.g. (Odessa ambulance station: operation report 1903–1905 yy.). Available from: <http://www.ambulance.odessa.ua/Istoriya.htm/>

7. Fedak BS, Zabashta VF. Shvidka dopomoga Kharkivshchini: kroki istorii ta s'ogodennya (Kharkiv ambulance station: the lessons of history and the present). Available from: <http://emergency.in.ua/history/323-st-4-18>

8. Stadnik A. Skoraya pomoshch' Khar'kova: istoriya. «Staryy Khar'kov» (Hharkiv ambulance: history. The old Kharkiv). Available from: http://www.sq.com.ua/rus/news/obschestvo/01.03.2016/skoraya_pomosch/

9. Stebel's'ka MO, Kal'nitskiy M. Golovniy likar KZ ««DSShMD» DOR». Available from: <http://emergency.in.ua/history/dnepropetrovsk>

10. Available from: http://gorod.dp.ua/history/article_ru.php?article=1536

11. Kovalinskiy V. Yubiley Skoroy (Anniversary). Available from: <https://www.interesniy.kiev.ua/yubiley-skoroy/ER>

12. Kal'nitskiy M. Shvidka medichna dopomoga v Kyevi (Kyiv ambulance). Vechirniy Kyiv. 2012;77(18969). Available from: <https://www.ua/18969/art/1349941890.html>

13. Kal'nitskiy M. Karetu mne (Carriage to me). Gazeta po-kievski. Available from: <https://www.interesniy.kiev.ua/karetu-mne/>

14. Totkiy O. Budni skoroy pomoshchi (Weekdays of ambulance). Available from: <http://tov-tob.livejournal.com/80598.html>

15. Available from: https://uk.wikipedia.org/wiki/Будинок-Київської_думи#/media/File:Dum_sqr7.jpg

16. Deviz Feofila Yanovs'kogo – shchonayblizhche do khvorogo (Motto of Theophilus Yanovsky – closer to the patients). Available from: www.health-ua.org/archives/health/926.html

17. Available from: https://ru.wikipedia.org/wiki/Зекцер_Иосиф_Абрамович

18. Feshchenko YuI, Mel'nik VM, Prihod'ko AM, Aref'eva LV. 90 rokov v im'ya zhittya. Do yuvileyu Derzhavnoi ustanovi «Natsional'niy institut ftiziatrii i pul'monologii im. F. G. Yanovs'kogo NAMN Ukraini» (To anniversary of SO «National Institute of Phthisiology and Pulmonology named after F. G. Yanovsky NAMS of Ukraine»). Ukr. pul'monol. zhurn. 2012;3:14.

Theoretical and practical J. «Asthma and allergy», 2016, 3

P. F. Dudka

Doctor of medical science, professor

Internal Medicine Dental Faculty

National Medical University named after A.A. Bohomoltsia

blvd. Shevchenko, 13, Kyiv, Ukraine, 01601

tel.: +38 (044) 540-96-74

e-mail: ddoobr@meta.ua