Z. Kheladze, Zv. Kheladze

"The Other"Critical Medicine of the 21st Century-The Problems of Management (Tbilisi, Georgia)

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The first distinctive sign "The Other" Critical Medicine should be the "divorcee" from anesthesiology. Olsou,Critical Medicine in different countries is known under four different names: in USA it's "Critical Care Medicine", in European Union countries – "Intensive Care Medicine", in Russia – "Reanimatology", and in Georgia – "Critical Medicine". Besides, the doctors of these different countries do not place the same connotation into these terms. Hence, the second sign of the "The Other"Critical Medicine should be in establishing a single term out of existing four that will be acceptable for everybody and will be based on the common notion.Olsou,The specialty will by focusing on the life-threatening conditions. The third sign of the "The Other" Critical Medicine is the novel finance strategic from different countries. Therefore, the fourth sign of will be the adaptation of studding and working processes of the medical personnel with aggressive nature of Critical Medicine and some such attempts are already in place. The sixth sign of "The Other" critical medicine" should become the new model for operation of critical medicine service. The model created in Georgian Critical Care Medicine Institute can be used as a prototype of such model.

KeyWords: CriticalMedicine, Anesthesiology, Reanimatilogy, IntensivCare Medicine, Life-threatening conditions, Management.

The research started in the 80s of the previous century. The Academy of Sciences of the Soviet Union considered it a priority research direction in the field of fundamental medicine, while the State Committee of innovations of the USSR proclaimed some parts of it as invention and rendered them confidential. Then, in those distant years, we that the forthcoming 21st century would be the renaissance era. Unfortunately, it's almost two decades since the start of the 21st century, but the signs of renaissance are nowhere to be seen. However, we stand beside our belief and hope that, if not in its entirety, the progress can be achieved at least in some spheres and as an expression of this belief, I would like to present the new vision of the healthcare system service that represents our specialty and is known asCcritical Medicine.Moreover, defining the prospects for the development of this specialty comprises one of the responsibilities of Georgian Critical Care Medicine Institute,

1. The practice shows that Critical Care medicine is still is perceived in conjunction with Anesthesiology. Anesthesiology is the science of pain and it has completely different goals and aims from critical care medicine – science of life-threatening conditions. Critical Medicine formed as a practical medicine branch in the fifties of the last century. The first generation Critical Medicine doctors were simultaneously an anesthesiologists as well, since, unlikely other physicians, they had to master different methods of Critical Care Medicine services, including cardio-monitoring, artificial ventilation, etc. Thus, if initially considering those two specialties together was appropriate, currently, their conjunction indicates that there still prevail beurocratic stereotypes in the field of healthcare services that need to be broken. Preserving such stereotypes hinders independent development of these professions and their progress. Moreover, currently the amount of information in each of this spheres is so huge that it is hard to contain in the brain of one mortal physician, thus, in the best case, in each profession we will end-up with half-educated doctor. The services of thus half-made and "incapable-minded" doctor create threat to the patient's life. In this regard, Georgia was one of the first countries to discriminate these two activities from each other for almost twenty years now. It can freely be stated, that without such an act the in-care sphere of Georgian healthcare services would have been stuck in the previous century. In Georgia, then burdened by wars and economic crises, such distinction enabled the surgery patients and critical patients to have one person – "Anesthesiologist" and "Critical Medicine Doctor" to be responsible for their treatment process. Such concentration of the responsibility significantly increased its quality. Apparently, what Georgia could manage in those difficult years, which is manifested by hundreds of thousands of

people cured through such practices, can be more easily introduced in other countries. Thus the first distinctive sign of 21st century "The Other" Critical Medicine should be the "divorcee" from Anesthesiology.

2. But 21st century should be witnessing further progress in this respect. Critical medicine in different countries is known under four different names: in USA it's "Critical Care Medicine", in European Union countries – "Intensive Care Medicine", in Russia – "Reanimatology" and in Georgia – "Critical Medicine". Besides, the doctors of these different countries do not place the same connotation into these terms. Some clarity in this area can be shed by the classification of life and death set by Georgian Critical Care Medicine Institute. By very rough estimates, the life can be segregated into "independent" and "associated" forms, the latter is covering the life of "disabled persons","persons with psychic disorders", "persons in chronic vegetative condition", and "critical" or "life-threatening condition". Critical Medicine is the science that studies exactly this form of life. This science has recovered that some specific changes are occurring in the organism that experiences critical conditions and these changes, as a rule, propagate the transfer of this organism into death. Through observations and influencing such changes the Critical Medicine has managed to postpone the death and preserve the human being alive. Similarly, the death can also be subdivided into "permanent" or "traditional" and "short-term" forms. "Brain death" and "clinical death" are recognized as the part of the latter form. "Death of the Twelfth Lama" and "Mummy death" should also be attributed here, but this is not yet acknowledged. Out of these forms of death "clinical death", during which it is still possible to completely revive the person, is the main subject of Critical Medicine studies. Hence, Critical Medicine can be considered the science that explores flanking forms of life and death. However, the notion of Critical Medicine can be otherwise defined. In this case the foundation of Critical Medicine is not the condition of the object, but rather the type of influence exerted on this object, thus uniting under Critical Medicine all conditions that apart from treatment require care, though the amount of people in such a condition is quite huge. Though such conditions require simultaneous treatment and care, sometimes even intensive one, they, however, should be separated from the Critical Medicine. The major concern here is that there is no threat to life. Therefore, there are no disruptions of livelihood function or functions and multi- or single organ failures that are imposed by such threats.It is also noteworthy, that in the nearest future the Critical Medicine itself is expected to be subdivided into sub-specialities: creating separate units of Critical Medicine for infants, children and adults. In this area Georgian Critical Care Medicine Institute was amongst the first to establish a separate clinical unit for elderly people in critical condition and appealed to others to follow. The segregation of Critical Medicine into cardiologic, infectious and other sub-specialities is also apparent. Their existence might not look very promising, but life introduces its own corrections and we are obliged to take them into account. Hence, the second sign of the "different critical medicine" of the 21st century should be in establishing a single term out of existing four that will be acceptable for everybody and will be based on the common notion, focusing on the life-threatening conditions and establishing sub-specialties studying these conditions.

3. While defining the prospects for future development it is crucial to consider the aspect of financing the medical activities. Up until recently Bismarck and Semashko models are used, with varying intensity, to finance healthcare services. Bismarck, being a Chancellor of Germany, based its model on profit winning medicine ideology. While Semashko, who was the only university-graduated minister in Lenin's government, gave preference to social medicine. Interestingly, Georgia is the only country in the world that experienced change of the financial policy for four times during the twenty year period: before departure of the communists and shortly afterwards, approximately until 1994 it was the Semashko model; during the transition from socialism to market economy, between 1995-2003, it was a combination of Semashko and Bismarck models; in 2013-2015 it went back to Semashko model .In this regard, it's likely that the 21st century will introduce a completely different policy in the medical sphere. The countries are created by the people, and the most valuable those people have is their health. Therefore, protecting the health of its population should become the unmost concern of any country, while the remaining functions of the statehood should be taken care of only after accomplishing the former. Within such approach, the state should fully finance Critical Medicine and other strategic spheres

of Medicine. Hence, the third sign of the "The Other" Critical medicine" of the 21st century is the novel finance strategic in different countries.

4. Unfortunately, the half-a-century practice of Critical Medicine revealed it to be an aggressive medicine and this aggression is displayed not just towards the patient, but the medical personnel as well. The data of Georgian Critical Medicine shows that the life expectancy of the critical medicine doctors and nurses is 3,2% shorter to that of the surgery personnel. Moreover, in this medical staff the frequency of diabetes is greater by 2,7%, the hypertonia – by 3,5%, myocardial infraction – 3,1%, cerebral blood circulation disorder – 3,4% compared to other medical specialists.Naturally, the physical strain and negative psychic emotion associated with this profession leave their trace on the health of the critical medicine doctors and nurses. This is topped by the unwanted influence on medical personnel of X-ray and radiological research methods utilized in such patients.The contact of the medical personnel with the infection-causing antigene stuctures in critical patients with infactious complications is also significant. All these indicate at discrepancy of the medical personnel's potential with the physical and psychic as well as other requirements associated with professional peculiarities. In discharging this negative impact great emphasis is assigned to the reduction or working hours in the critical medicine clinics, introduction of regular mandatory precautionary check-ups of the personnel and other preventive measures. It's noteworthy, that Georgian Critical Care Medicine Institute is one of the first medical institution in which the daily working process is accompanied with listening to classical and light music dissipating the negative emotions. In this respect, the attempt to introduce special physical and psychological training system for the students and residents aspiring to obtain this specialty in the Institute is also worth mentioning; it is perceived to ease their adaptation to working conditions in future. Therefore, the fourth sign of "The Other"Critical Medicine will be the adaptation of studding and working processes of the medical personnel with aggressive nature of Critical Medicine and some such attempts are already in place.

5. The management of the treatment process Critical Medicine includes establishment of different model. Currently, one of them models is created in Georgian Critical Care Medicine Institute. The main peculiarities of this exclusive model include:

* establishment as a separate specialty
* existence as a monodisciplinary specialty
* pre-diploma studies
* institution of three-year residency
* system of certification examinations
* "new doctor"
* licensing requirements
* guidelines
* common standards and protocols
* cheap bed-days.

Contrary to this,Critical Medicine in different countries of the world is not represented as an independent specialty and is merged with Anesthesiology. In the best case, it is seen as a sub-specialty only in several countries.In majority of the countries it is established as a multi-discipline. While, in this system the Critical Doctor is more a coordinator of the treatment process, in Georgian model the Critical Doctor is conducting the entire routine of the treatment of the critical patient him/herself. Other countries also do not have a segregated pre-diploma studies, three-year independent residency institution and the system of independent certification examinations in Critical Medicine.Contrary to Georgia, other countries do not have licensing requirements for Critical Medicine.Georgian is the second language in the world in which a substantial 700 page fundamental manual of Critical Medicine is available. Besides, this is an original manual and not translated from the English. The existence of highly professionally elaborated and easy to use and control standards and protocols is also worth mentioning. These standards and protocols created in Georgian Critical Care Medicine Institute are 10-times cheaper than their analogues abroad. From

example, bed-day costs: in Georgia cost $250 and in USA - $5000). They have been tested in Georgian Critical Care Medicine Institute for 14 years and the results achieved by using them are no different from their analogues, since they guarantee preserving the lethality rate within 20% range. It's noteworthy, that Georgia is ready to offer its exclusive model for implementation in the healthcare services of the developing countries. As known, majority of the planet's population is living in such countries and has no access to Critical Medicine services due to its expensive price. However, introduction of the Georgian model should be attractive for the developed countries as well, since it provides the possibility of frugally utilizing the excessive resources, which usually represents a main problem of these services. The sixth sign of "The Other" Critical Medicine" should become the new model for operation of Critical Medicine service, and the model created in Georgian Critical Care Medicine Institute can be used as a prototype of such model.

Refereces:

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ზ.ხელაძე,ზვ.ხელაძე
"სხვა" კრიტიკული მედიცინა 21-ე საუკუნისათვის-მართვის პრობლემები

მოყვანილია კრიტიკული მედიცინის, ასევე ანესთეზიოლოგიის, კრიტიკული ზრუნვის მედიცინის, რეანიმატოლოგიის და ინტენსიური ზრუნვის მედიცინის ერთმანეთისაგან განმასხვავებელი ნიშნები. მითითებულია, რომ უმჯობესია კრიტიკული მედიცინის ფოკუსირება მოხდეს მხოლოდ სიცოცხლისათვის საშიშ მდგომარეობათა შესწავლასა და მკურნალობაზე და ამ სპეციალობის ექიმსაც კრიტიკული მედიცინის ექიმი ერქვას.