Caring for Academic Ophthalmology in Croatia

Zdravko Mandić, Zoran Vatavuk

Department of Ophthalmology, Sisters of Mercy University Hospital, Zagreb, Croatia

Like any other area of academic medicine in Croatia, academic ophthalmology has always been limited by or has depended on the factors outside the profession itself: during the communist regime, it was mostly political and ideological correctness of academic ophthalmologists, and today during the social and economic transition, it is the lack of finances, planning, and sophisticated technology. The four university eye clinics, which are the pillars of academic ophthalmology in Croatia, provide health care to most difficult cases, educate students, residents, and specialists, and do research. On the other hand, they lack equipment, room, and financial recognition. This ever growing imbalance between requirements imposed on academic ophthalmology today and its possibilities make it less and less attractive, especially in comparison with private practice. The possible solution lies in increasing the independence of ophthalmology from pharmaceutical industry and politics, especially in research and financial aspects.

Key words: academic medical centers; education, medical; ophthalmology

Croatia has a population of 4.5 million and 306 ophthalmologists, ie, 7 ophthalmologists per 100,000 population. The World Health Organization recommends 1 ophthalmologist per 25,000 population (4 per 100,000) (1). In the European Union (EU), the average number of ophthalmologists per 100,000 population is 7-9, ranging from 1.4 in the UK to 19.3 in Luxembourg (1). According to these numbers, Croatia belongs to a group of countries with the optimum number of ophthalmologists per population.

Ophthalmologic services in Croatia are delivered through 17 stationary departments, 4 university eye clinics, and a larger number of ophthalmologic outpatient clinics and private polyclinics. During the communist regime (1945-1990), the entire health care system in Croatia was state-owned. In 1994, when a privatization process in the health care begun (2), the first private outpatient clinics and polyclinics in ophthalmology were opened and today there are around 50 of them. Academic ophthalmology, on the other hand, continues to live, or rather survive, at the 4 university eye clinics – two in Zagreb, one in Rijeka, and one in Split – which all together employ 10 professors, 7 assistant professors, 6 instructors, and 7 research fellows. These eye clinics have always offered top medical care and have been a backbone of higher medical education, where students, residents, and specialists alike acquired new knowledge and skills and became acquainted with modern technology used in the field of ophthalmology.

Historical Background

Like any other area of academic medicine in Croatia, academic ophthalmology has always been limited by or has depended on the factors outside the profession itself: during the communist regime, it was mostly political and ideological correctness of academic ophthalmologists, and today during the social and economic transition, it is the lack of finances and sophisticated technology. The influence of politics has decreased and situation has improved after the first democratic elections in the country in 1990, but the individual and collective mind set still have a long way to go (3).

During the 1991-1995 war (4), academic ophthalmology in Croatia stagnated. The academic staff was focused on mere professional survival rather than on professional advancement and scientific work. In the postwar years, it was all the more difficult to redirect the interests of ophthalmologists back to the advancement of profession and educational and research aspects of their work, as a third of the country was destroyed, a quarter of population displaced, economy damaged, and areas directly affected by the war given every priority (5,6).

Today, there are still some questions left unanswered regarding the model and organization of the health care system (7,8). As many other academic disciplines in Croatia, academic ophthalmology also functions and develops under unclear and unstable conditions (9). While pondering on the situation, one
same share of the budget from the Ministry of Health (mostly difficult) patients per year, they receive the supplies. Although eye clinics treat greater number of to all of them due to the lack of expendable medical receive the treatment, because it cannot be provided among difficult cases those, or the one, that will lect among difficult cases those, or the one, that will.

The Situation
Ophthalmology is a technologically highly developed field, which is why clinical work and scientific research in ophthalmology require the use of expensive, modern, and sophisticated instruments. Croatian ophthalmology cannot afford such equipment, but it can neither join multicentric studies, which keep bypassing Croatia primarily for the lack of state-of-the-art technological support. Thus, scientific work in ophthalmology in Croatia boils down to epidemiologic studies, reports on clinical experience, and reports on unusual and extraordinary cases. This relatively poor scientific activity is reflected in a total of 73 ophthalmologic articles whose authors had Croatian affiliation, which have been published in MEDLINE-indexed journals since 1991 (when Croatia became independent) (Fig. 1). The upsurge in the number of published articles in Croatian journals in 2001 was due to a thematic supplement in ophthalmology in one of the Croatian journals.

Eye clinics mostly admit complicated and difficult cases requiring multiple surgeries and expensive treatments, which quickly use up small and limited resources as they are, while simple cases end up in the hands of private practitioners. The most difficult part is when academic ophthalmologists have to select among difficult cases those, or the one, that will receive the treatment, because it cannot be provided to all of them due to the lack of expendable medical supplies. Although eye clinics treat greater number of (mostly difficult) patients per year, they receive the same share of the budget from the Ministry of Health as other stationary departments, and that is the only financial source they have. Thus, I know – I can – I don't have has become the curse of everyday life of academic ophthalmologist in Croatia.

Private ophthalmologists choose to treat the easiest cases, where expenses for the treatment are small and earnings great. Moreover, the population they treat is pre-selected by their financial abilities, ie, poorer people cannot afford the services of a private ophthalmologist, or seek the treatment abroad. The eye clinics are actually the only places in Croatia where difficult cases and poor and uneducated people can be and are treated, because services are covered by Croatian Institute of Health Insurance and, of course, much cheaper than they really are. Furthermore, the fact that private ophthalmologists make 3-10 times on average more than ophthalmologists working in top eye clinics is deeply frustrating and damaging to the academic ophthalmology. Of course the work at the clinic is unattractive when one has to do at least three times more work (clinical practice, education, and research) for at least three times lower salary than a colleague ophthalmologist in private practice.

Ophthalmology as a specialty is attractive to women because it is not as physically demanding as general or thoracic surgery. But most women academic ophthalmologists are also expected to assume more responsibilities at home and with their family (11). In this respect, the situation in ophthalmology is not different from that in other medical specialties due to general feminization of medical profession. The move of Massachusetts Institute of Technology seems a promising start in solving these issues (11).

Unfulfilled Needs
Medical equipment. Medical equipment used for everyday work at Croatian eye clinics is 10 years old on average. However, old equipment it is not even the biggest problem, because one can do almost 90% quality work even with instruments so old (they just has to be maintained carefully and with love). Much bigger problem is the inability to keep up with world trends, because expensive and sophisticated equipment such as that used in eye clinics in the developed world cannot be afforded by Croatian academic ophthalmology. The main way to obtain new instruments is through donations, which are either small due to poor economy and unfavorable tax policy (donations to health care institutions are not tax-deductible) or made by pharmaceutical companies that need eye clinics and academic ophthalmologists in order to carry out their own research projects. The other way to obtain new medical equipment is to be close, again, to the centers of political power, which are sometimes willing and able to redistribute health care funds (3), or through one’s own efforts and efforts of the patients, friends, and colleagues from other hospitals in the country and abroad who sometimes donate (give away) smaller instruments and cheaper equipment.

Top experts. Academic ophthalmology is a very demanding and complex discipline, because it com-
bines highly differentiated medicine, education, and research. "Learning by doing" is the only way to learn in ophthalmology, so the resident or specialist in ophthalmology has to perform as many examinations and surgeries as possible on daily basis, along with literature search, teaching, clinical research, and administrative work. To be able to do this, one has to have a lot of energy, enthusiasm, and love for the profession. However, education is just one more segment in the overloaded time table of an academic ophthalmologist. New knowledge and diagnostic and therapeutic procedures emerge every day, and it is important to learn and educate especially younger colleagues, not to lie behind. Acquiring new knowledge extramurally again seems to be the most difficult part in the education of every ophthalmologist. If they wish to present their experience or update their knowledge and skills by attending an ophthalmologic congress or meeting, Croatian academic ophthalmologist are forced to seek support from pharmaceutical companies. But pharmaceutical companies want something in return: they support only ophthalmologists who prescribe their medications, buy medical supplies from them, or act as opinion leaders for their products (13). On the other hand, if an ophthalmologist receives any kind of support from friends and through private connections, he or she becomes their eternal debtor, obliged to reciprocate through ophthalmologic services. Thus, whatever way you look at it, it is always an uphill road providing only short-term solutions and long-term problems.

How to Improve Academic Ophthalmology?

As institutions of excellence, clinics should provide care (and they do with great efforts) to most difficult patients. For that, they need to have modern equipment, up-to-date education, and top experts.

Short-term Measures

First of all, the price charged for medical services should be the real price and this change should be introduced at the state level. The government should stimulate individuals and institutions to make donations to health institutions by making these donations tax-deductible. Second, pharmaceutical companies should invest at least part of their extra profits into the equipment, facilities, and continuing education of ophthalmologists. This would allow ophthalmologists to perform research in "hard-core ophthalmology", which is not important to the pharmaceutical industry but to the experts they can learn the most from, irrespective of the institution where these experts work. In this respect, a database of ophthalmologists would be most useful, showing what type of pathology or treatment an academic ophthalmologist deals with in his or her everyday practice.

Long-term Measures

First, ophthalmology should become independent, ie, ophthalmologists should be able to make professional decisions independently and at all levels. For example, their research and choice of therapy should not depend (so strongly or solely) on the interests of pharmaceutical companies, which today finance most of the clinical research in Croatia and decide on the directions in which ophthalmology develops. Second, ophthalmologists should have the freedom and obligation to report unethical and too commercialized treatment, and refuse to do so. Thus, overtreatment, overdiagnosing, and overprescribing drugs could be reduced. Finally, ophthalmologists should have revenues that would provide them financial independence, which could only contribute to their professional integrity in every aspect: clinical, scientific, and educational. Influence of university eye clinics on the practice and development of ophthalmology in Croatia should by all means be stronger in both professional and academic sense, as they remain the main sources of ophthalmologic knowledge and expertise and set the level of quality of ophthalmologic services in the country. Academic ophthalmology in Croatia deserves it if nothing else, than for the enthusiasm of its ophthalmologists, their dedication to and love for their work.

References

11 Andrews NC. The other physician-scientist problem: where have all the young girls gone? Nat Med. 2004; 8:439-41.
13 Breen KJ. The medical profession and the pharmaceutical industry: when will we open our eyes? Med J Aust. 2004;180:409-10.

Correspondence to:
Zdravko Mandić
Eye Clinic
Sisters of Mercy University Hospital
Vinogradská cesta 29
10000 Zagreb, Croatia
zdravko.mandic@inet.hr