

Teaching standardization in ophthalmology

A padronização do ensino em oftalmologia

As in basic education, in which students are divided in grades, so the same content is taught to everyone, this standardized trend is seen among ophthalmologists. In the first years of medical residence, the student learns to examine and to understand how the eye functions. In the third year, he defines some areas of preference and learns how to do surgery. When in specialty stage, he chooses an area of action. From then on, in general, he opts for the progressive hiper-specialty: retina, cataract, glaucoma, cornea, etc ^(1,2).

The pattern of background mentioned above encourages progressive acting, in which the specialist only cares for his area. So, each professional would devote his time and energy to study and act in only one segment. The fast technological development in medicine, with so much available knowledge, favors this pattern. Nevertheless, health should not be treated like an assembling line, where the patients go like in a conveyor from one to another sub specialist, depending on the symptoms. Society would not financially bear the mentioned pattern.

Althow the seven billion people Worldwide can only survive because of the optimization of productivity in general, secondary to the division of work in a linear sequence of specialized tasks (assembling line), due to constant gains of efficacy and standardized products. In the health area, this hierarchy leads to a terrible increase of cost, because the hiper-specialist tends to ask for more and more complex supplementary exams, in order to better evaluate the segment in which his acts, also prescribing clinic and surgical treatments, sometimes hasty ones. There is, therefore, a contradiction, in which the excessive standardization of health would take to the loss of efficiency instead of the desired assistance to the population ⁽³⁻⁶⁾.

As there are also complex ocular problems which will need a logical and elaborate reasoning from the doctor who understands the function of the eye as a whole and integrates his knowledge of various sub specialties. The background and progressive acting do not encourage and do not train the mechanism of thinking and reflecting concerning the eye, the vision and the patient, because in an assembling line each professional does a short and a repetitive task, so no one has the complete domain of the whole.

I do not consider wrong the pattern of medical residence or the option of the ophthalmologist in deepen his studies in a sub specialty. What I suggest is that the option of many colleagues who are still in his training should be reconsidered, because they act in only one area. Many times, we trace our professional projects influenced solely in what is happening nowadays, while we should also try to project them facing a near future. In USA, for instance, hiper-specialty has been discouraged by the government, with a consequent cut in the number of scholarships after residence. Therefore, it is possible that overtime the more valued professional is the ophthalmologist who has a general background and who is prepared to adequately conduct not only classic diseases but also the complex ones, referring only very specific cases.

We are sure that the hiper-specialist will never disappear, but maybe there will be a smaller work market, also because technological developments progressively allow that a smaller number of professionals could see a greater number of people.

In relation to the more demanding patients, they will always value the professional who discusses the clinical reasoning and explains the problem and the healing possibilities in a coherent manner, or better, will value the ophthalmologist with a good general knowledge and who is trained to reflect about the symptoms, the diseases and the patients' needs. The standardized background of the medical residence or the supplementary stage does not generally give priority to the teaching of those characteristics mentioned, but offers the adequate tools for acquiring them, mainly by getting the students closer to the professors in an academic environment.

Nevertheless, I believe that it is in the stage of a fortuitous post-graduation (master or doctorate) that the young doctor will have better conditions of learning and training his reasoning over his practice, for those are the principles of scientific research.

While the linear and standardized system of the medical residence train the students, in general, with the same knowledge, the graduate program tends to optimize the individual potential of each student, by opening his mind and preparing him to access knowledge above the text book, knowledge acquired by means of reasoning, and also by giving him means to solve diverse and complex problems.

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REFERENCES

1. Chamon, W, Schor P/ **Teaching ophthalmology to the medical student: a novel approach.** Arq Bras Oftalmol. 2012;75(1):5-7.
2. Ventura CC, Gomes ML, Carvalho BV, Ventura LO, Brandt CT. Características e deficiências dos programas de pós-graduação em oftalmologia no Brasil segundo pós-graduandos participantes. Rev Bras Oftalmol. 2012;71 (3):173-9.
3. Bar-Yam Y. Making things work. Solving Complex Problems in a Complex World. Cambridge, MA: Nesci Knowledge Press; 2004.
4. Nye DE. America's assembly line. Cambridge: MIT Press; 2013.
5. Burgierman DR. O mundo está muito complexo. São Paulo: Abril; 2014.
6. Estacia P, Reginatto RC, Nunes TT, Silva TM, Pasqualotti A. Avaliação do custo de colírios lubrificantes a base exclusivamente de carboximetilcelulose no mercado brasileiro. Rev Bras Oftalmol. 2013;72(5):331-4.