

"ORO-GASTROENTEROLOGY", A TOPIC SUITED FOR PROFESSIONAL ORIENTATION?

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ABSTRACT

It is no doubt that during the last years, medicine and medical knowledge engaged in a process of hyper-specialization and intense focusing towards core details related to various pathological aspects. On the other hand, it is because of this orientation towards details that new bio-clinical relationships were established. One of these medical fields of interference is the relationship between digestive and oral diseases. Our aim is to explore the possibility of perceiving this pathological relationship as a new direction for professional orientation. Although the clinical basis regarding the cohesion of the two has been emphasized by the literature for many years by now, many aspects related to the aetiology and pathology of certain conjunct diseases are to be defined by detailed bio-chemical, cellular and molecular methods of investigation. Future doctors, but also the medical seniors could choose to explore this scientific domain, as it offers plenty of research directions and topics yet not fully understood.

Keywords: Specialization, Education, Professional, Retraining

INTRODUCTION

Obtaining a place in a European medical university implies entering a very competitive and knowledge-demanding environment – this situation being observed many countries [1]. Nowadays, students' entry to a Romanian medical school is based on the first hand on the academic performance in the national school exit exam (the baccalaureate), and on the other hand on an admission test in either anatomy & physiology or organic chemistry. Both medical and dental curricula are in Romania of six years duration and obtaining a professional degree (M.D. or DMD) after graduating medical or dental courses implies passing a final theoretical test and presenting the results of an original research thesis.

During the medical or dental six years academic curriculum there are very few professional/specialty orientation programs designed to assess students' complex personal profile. Such programs would give the students evidence-based guidance to certain professional orientation goals. Nevertheless, after graduation, young doctors may choose their further specialization from a standard set of disciplines after passing a nationally organized test (the residency exam). There are many studies that have investigated the factors influencing medical students or newly qualified doctors in their ultimate career choice [2-7]. Assessing the literature we may observe, for example, that even if surgery has historically been one of the most prestigious

and competitive specialty [8], the Association of American Medical Colleges National Resident Matching Program Database reported that the number of unfilled general surgery programs in the United States had grown from 5 in 1997, to 41 in 2001 [9]. Furthermore, such trends could be evaluated further in time because only after obtaining a superior specialty degree, are the specialists able to narrow their professional interests to sub-disciplines or work in multidisciplinary teams depending on personal interest. Unarguably, there are multiple trends in health care that converge into a profound and continuous change in roles of health care professionals, these trends being considered to relate to the professional values or standards of the latter [10].

Our aim through this paper is to assess to what extent can a scientific and academic topic like oro-gastroenterology – as a multidisciplinary target domain – be of interest both for specialists or researchers. The article approaches this hybrid potential domain as an over-specialty one, given the fact that it requires not only medical but also dental expertise. To this moment, there are still visibly few specialists trained in Romania for both professional areas. Moreover, methodologically we offer a conceptual approach based on a global review of the literature, stressing the need for future original statistically analyzed studies that would describe trends and preferences of Romanian specialists regarding professional orientation towards multi- and interdisciplinary work in the general and scientific practice.

DEFINING PROFESSION

As defined by the Oxford Dictionary, profession is a paid occupation, especially one that involves prolonged training and a formal qualification, its origins being in Middle English and denoting the vow made

on entering a religious order (via Old French from Latin profession, from *profiteri*, to 'declare publicly') [11]. Consequently, a profession is considered to be a vocation based on specialized educational training, its purpose being to supply objective counsel and service to others, for a direct and definite compensation, wholly apart from expectation of other business gain [12]. Otherwise, orientation implies a relative position, a direction, a person's basic attitude, beliefs, or feelings in relation to a particular subject or issue [11].

Therefore, it can be subtracted that the concept of professional orientation signifies a person's set of principles based on personal subjective and/or objective parameters regarding his or her own future occupation and qualification in a specialty. Nevertheless, it is considered by authors that it is the professional bodies that have a responsibility to provide good quality information for guidance in the personal career management [13, 14]. Moreover, evaluation of the teaching process is considered to be essential for monitoring the results of education, because, as no program is static, continuous control of the quality of teaching is essential for further development [15]. Subsequently, the profession defined by the process of professional orientation could be dependent on the quality in education of the medical undergraduates.

DENTISTRY AND THE GENERAL & GASTROENTEROLOGICAL MEDICAL CARE

An unarguable fact is that nowadays, an increased interest in alternative, preventive, and therapeutic strategies in dentistry is becoming more and more visible [16]. This happens because on the first hand pathologic dental conditions are proved to be linked to a great number of general and

systemic diseases, and on the other hand because of the increasing interest in assessing patients' expectations and experiences and in understanding health needs, patient satisfaction with treatment and the perceived overall quality of health assistance provided [17, 18]. Nevertheless, serious dental conditions seemingly altering patients' life quality may arise in case of multi-system medical diseases as, for example, the case of iatrogenic immune suppression in organ transplants [19].

When referring to the relationship between dentistry and dental diseases on the first side, and gastroenterology and gastrointestinal diseases on the other side, the interdisciplinary bond and the pathogenic common processes get even stronger as both the former and the latter are parts of the same physiologic system that insures digestion, absorption and metabolism of chemical vital elements. Therefore, important common grounds of scientific research and debate have been identified by the literature:

- The oral manifestations and dental diseases in patients suffering from gastro-esophageal reflux disease GERD [20-22];
- Common pathogenic patterns and treatment challenges determined by the infection with *Helicobacter pylori* regarding the gastrointestinal mucosa, the oral mucosa and the periodontium [23-25];
- The oral findings and dental diseases related to the inflammatory bowel diseases: Chron's Disease and Ulcerative Colitis – the former being well known for it's systemic and especially oral manifestations [26-27];
- Dental implications and consequences related to the use of probiotics [16];

- Interventional endoscopy challenges related to swallowing of foreign bodies resulted from dental accidents [28];
- New extradigestive implications in diseases related to the immune system malfunction (leading to autoimmunity), otherwise well known by the professional communities, like the Celiac Disease or the chronic inflammatory bowel diseases and other causes of maldigestion and malabsorption, where dental conditions such as such as dental enamel defects (enamel hypoplasia, amelogenesis imperfecta, stains for calcium deficiency or excess, fluorosis, and erosions), recurrent aphthous stomatitis, angular chellitis, and atrophic glossitis are important features in the clinical diagnosis of these diseases [29], the début of which could be related to the onset of changes in oral health, such as delayed tooth eruption, decreased size of teeth, enamel formation problems, or even dysfunction of the salivary glands [29 – 31].
- Diet dilemmas related to dental treatment especially in children in need of orthodontic therapy, the relationship between oral health status and diet being today well documented since good oral health is important for chewing and eating without causing dietary restrictions [32, 33]. Awareness of the potential negative consequences of such side effects forms an essential part of the dental and medical specialists' commitment to produce evidence of the quality of care [33].

These are just a few of the new and emerging potential interdisciplinary and multidisciplinary areas of interest for common study and practice of dental

practitioners and gastroenterologists. It is clear that the international field literature shows great interest in this topic pleading once again for the scientific and professional connection between the two – which makes this borderline area well suited for future professional orientation, especially for teams of specialists.

BREAKING BOUNDARIES IN PROFESSIONAL ORIENTATION

It is a truth universally acknowledged in scientific communities that the *publish or perish* lexical anecdote is getting more and more real and intrusive in one's professional life. Therefore, developing a new professional orientation direction also means new research directions. There are to be identified six main pathologic categories where both dental medicine and gastroenterology could converge:

- Digestive diseases secondary to dental and oral conditions – chewing deficiencies, bacterial overload;
- Dental and oral diseases of gastrointestinal origin – oral patterns secondary to gastro-esophageal reflux disease;
- Dental and conditions seen as a result of the systemic impact of gastrointestinal pathogenic mechanisms – anemia, maldigestion and malabsorption syndromes;
- Both dental and gastrointestinal conditions as manifestations of systemic diseases – Chron's Disease;
- Oral and digestive genetic disorders – Peutz Jegers Syndrome, Gardner Syndrome;
- Oral metastatic disease.

All these could be pillars for inter-disciplinary approach, multi-disciplinary involvement and super-disciplinary personal development, as they are in the same time real solutions for the *publish or perish*

dilemma. This happens because all these connections may present scientific value through:

- Fundamental research programs regarding pathophysiologic and etiologic interferences;
- Development of new work-up techniques suitable for both medical domains;
- New scientific architecture styles for multicentric multidisciplinary studies;
- Continuous improvement of international and/or inter-institutional collaboration and of public-private partnerships in research and education.

Nevertheless, joint directions of professional orientation could prevent and improve possible negative professional outcomes resulting from litigation and liability. The doctors are presumed by the law to know and/or to foresee all possible damages, even those resulting from border discipline pathogenicity. Therefore, both the dentist and the gastroenterologist should be able to assess signs and symptoms specific for the related discipline, and to plan work-up directions many of which enrolling other professionals as well. Not to mention that every practitioner has the deontological and legal duty to correctly and thoroughly inform the patient about his or her condition, about the diagnostic and work-up plan, about possible treatment options and future prognosis and follow-up. Through multi-disciplinary teams specialized for borderline diseases all these weak spots could be transformed into real strong points regarding professionalism and best possible patient outcome.

CONCLUSIONS

1. Counselling programs regarding professional orientation are nowadays a must in all academic communities – such programs developed by highly profiled

specialists and tutors could be one of the few methods through which medical curricula would continuously find its scope regarding the durable development of specialists and research teams.

2. One of the main challenges regarding professional multi-disciplinary evolution is the administrative narrowing of medical and dental specialities in which postgraduates could refine their continuous medical education. Such fields as the ``oro-gastroenterology`` are yet not recognised by the professional decisional parties and therefore postgraduates are not stimulated towards such topics requiring mainly personal involvement and study.
3. Professional orientation towards ``oro-gastroenterology means: (i) complex

comprehension of pathophysiology and etiology processes; (ii) rapid medical response to intricate mechanisms; (iii) state of the art clinical skills regarding physical examination and history talking; (iv) enrolling in new research programs; (v) professional liability and litigation prevention; and (vi) always finding a way for both constantly learning and teaching new things.

4. If not ``oro-gastroenterology`` then at least dental medicine curricula for the medical students: the lack of dental knowledge among medical students could be a serious weak point in their undergraduate studies program. Only through stable fundamental education could great results be achieved.

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