Teleradiology: challenges to be faced for breaking a paradigm of the specialty

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With the arrival of the new millennium, information has become one of the main raw-materials on which the contemporary society development is based. The employment of the modern informatic technology has allowed, through an efficient information exchange, countless new approaches in the medical activity which may be gathered together under the term "telemedicine".

Radiology is one of the specialties that has most benefited from the telemedicine progress, more specifically in the fields of telediagnosis, specialized second opinion (teleconsulting) and distance teaching. In Brazil, a number of academic and private experiments have been made in teleradiology. However, in the moment we start experiencing this new reality, it is essential to be attentive to hitherto unprecedented questions which must necessarily be discussed, aiming at the establishment of technical, ethical and professional guidelines, allowing the safe and profitable use of these new tools.

Only recently in our country has this debate been started, and this has been done systematically by two large groups: the first one being essentially philosophical and focused on teaching issues and telediagnosis, aiming at defending the specialty; and the second one, technically and politically-driven, with a multidisciplinary approach, and where Radiology is included in the process of discussion, development and implementation of rules for the telemedicine in Brazil.

The first group has been working in the sphere of the recently created CBR Commission on Teleradiology, with discussions about distance teaching and teleassistance applications. The distance teaching tool seems to be quite

The second group has been involved in a more technical/political debate with a view beyond the limits of the specialty. In this year of 2006, two important forums were created for discussions related to tele-health and informatics in health in Brazil. The first one, denominated Comitê Permanente de Telessaúde (Permanent Committee on Tele-Health), is held in the Ministry of Health, joining public and academic institutions representatives from all over the country. Through information and experiences interchange, this group has presented reasonable advances towards a

appropriate for facilitating the tasks of continued education and specialist title revalidation, and soon will be adopted by CBR (Brazilian College of Radiology). As regards the projects of assistential teleradiology, two different realities have been the reason for enthusiastic and productive discussions. Undoubtedly, one of the main teleradiology advantages is the possibility of overcoming distances by means of images and reports transmission, forwarding the radiologist's opinion to distant places where a considerable part of the population has no access to the assistance of a specialist. In public health projects, the specialized teleassistance provided at distance, in a partnership with a generalist physician, may save many lives in a continental country like Brazil, and should be defended by every professional who is aware of his/her social responsibility. In the meanwhile, we should, also, to be precautious about the third globalization wave, especially in great urban centers where major investment groups interested in improving their results from business involving diagnostic imaging have projects for implementation of clinical reports centers, aiming at reducing the number of radiologists per study performed, which may generate unemployment or subemployment in our area of activity. In this case, in private projects involving teleradiology, the mandatory presence of a CBR-certified specialist in each distant center seems to be the solution for this issue.

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proposal of national level, prioritary projects of tele-education applied in the basic health network and in assistential telediagnosis. The second forum, denominated Comissão Especial de Estudos Temporária de Normalização em Informática na Saúde (Temporary Special Studies Commission on Normatization of Informatics in Health), is held in ABNT (Associação Brasileira de Normas Técnicas), and is attended by representatives from government, academic, class institutions, and also, from technology and medical equipment companies. This group, whose main task is to formalize the Brazilian technical standard for the industry according to the international ISO standards, has recently

been divided into four working subgroups in the areas of Models & Concepts, Communication & Equipment, Terminology, and Safety.

Therefore, although the offer, by the market, of Picture Archiving and Communication Systems (PACS) has occurred in Brazil in a fast way during the last few years, generating the idea that the practice of teleradiology depends only on a system installed in our clinic or hospital, it is essential for us to understand that we have a long way ahead of us to define ethical and technical criteria which will allow a safe practice with the different teleradiology applications in Brazil.