Consolidation of Occupational Health through integrated training and research in Higher Education


Research in Occupational Health forces to control the risks associated with the work. Occupational hazards can affect the health of workers, being related to the normal development of the activity and productivity. One of the objectives of health protection is the identification, assessment and correction of work-related risks. Consequently professional and scientific training programs must be considered to improve work.

Taking into account the prospects, needs and interests of South America and especially Ecuador, since the end of the last decade (Reglamento de Doctorados 2008) an appropriate context for excellence training in the university is materialized. Training programs in Occupational Health research integrated into Higher Education are proposed in line with the culture, values of the country and particular labor activities carried out in the affected areas.

Higher Education means to be imparted through institutions integrated in the National System of Ecuador, governed by the Education Law in force in the country (Ley de Educación Superior 2000). The institutions of this system are public, private co-financed by the state budget and private self-financing that assist in the care of the state duty; considering the universities and polytechnic high schools as nonprofit entities (Reglamento a la Ley 2000). The new training framework implies clarity and accuracy in transmission, quality content and objectivity in the procedures. The institutions of the National System of Higher Education carry out the pursuit of truth, development of universal and ancestral Ecuadorian cultures, science and technology, through teaching, research and links with the community (Ley de Educación Superior 2000). This will follow the constant updating and adaptation of teaching and research activities in order to meet the requirements of national progress. For the development of effective programs will consider the outcomes at least in medium term, assuming the adaptation period implicit to establishment training. Achieving
systems that allow information on safety and occupational health reach all professional levels will result in improving
the organization of labor and scientific production.

Occupational risks can be prevented through proper design or redesign of jobs and the use of appropriate preventive
and protective measures. For the desire efficiency, people involved must have the education to know the risks and react
appropriately to them. Doctoral programs will help to improve the academic quality of the institutions of Higher
Education (Reglamentos de Doctorados 2008), so rules must be necessary to ensure quality and openness to new
programs. Considering the educational legislative framework, universities and polytechnic high schools will not offer
doctoral degrees at the end of undergraduate or professional qualification. It’s unable to start doctoral programs in the
postgraduate level or new developments of existing until 15th of May 2000, without the authorization of the National
Council of Higher Education. PhD in Occupational Health should be made independently of the programs that
correspond to other degrees and postgraduate degrees, i.e. master’s degree, specialization and higher diploma. In
addition, doctoral degree programs should be considered as a scientific discipline (Cardona & Franco 2005) with
implications for social improvement. The training of the programs shall be understood as a systemic and systematic
process with a defined objective in learning, requiring a rigorous planning and subsequent evaluation activities to
confirm that goals have been reached. The system shall meet the requirements demanded by the Ecuadorian society to
university bodies, in line with the quality standards of international training. Note that in regard to the implementation
and innovation of research in Occupational Health, it should be monitored and integrated into a scenario of specific
evaluation system, approved by the Superior Councils of each university. In turn, the Assessment and Accreditation
National System of Higher Education will integrate institutional self-appraisal, external evaluation and accreditation,
and will include universities, polytechnic high schools and technical and technology colleges in the country.
Professional and scientific field competencies should be achieved, meaning them as observable behaviors that lead to
the development of activity. In particular, it must contemplate training, development and indoctrination, understanding
the latter in terms of implementation of work safety and considering all these actions integrated into the objectives of
the role of the doctoral program. Overall, the program will be excellent if the objectives that were set prior to the
actions are achieved, in other words if there are competencies that were intended to obtain. Abilities will be applicable
at the workplace, enabling increased efficacy and/ or safety of workers. Also, to speak really about the quality of the
programs, the whole function process must be attend, satisfying the needs of the applicants and promoting science and technology as the foundation of national development. Doctoral programs in Occupational Health will include, as attainable quality criteria, quality in training and process, so its design or continuity.

Particularly relevant is the transferability and relevance of learning and involvement in the community. It is estimated the need for a single university environment in Occupational Health (as a framework that enhances new forms of collaboration), formalizing the contribution of research groups and positive interaction for development (Gea 2010). Considering the above and the need to establish environments that promote doctoral programs and research centers, possibility of improving occupational health as a national priority is emphasize, in addition to start establishing programs that contribute to advance in professional training and education of high-level scientific researchers through scientific specialization. Thus, the formation of fourth level (Doctorate in Occupational Health) integrated into the Higher Education System will aim priority: academic and professional training with scientific and humanistic vision, scientific and technological research (Constitución Política 2008), innovation, promotion, development and dissemination of knowledge related to occupational health, and configuration of development solutions in preventive culture.