

- Nurses and nurse training

The information here presented was compiled from a document that provides an overview of the nursing workforce in Latin America and has been produced by the Pan American Health Organization (PAHO) as a basis for analysis of this important dimension of health in the region. In addition, it contributes to the efforts of the International Council of Nurses (ICN) to gain an overall view of the structure and dynamics of the nursing workforce worldwide. It was written 10 years ago; however the situation of the nursing working force in Latin America has not changed a lot during this period of time. The paper refers to the category of "nurses" who, depending on the country, are referred to by different names (graduates or nurses) and it also refers to the group of auxiliary nurses and nursing technicians. The nursing workforce has been analyzed using as a framework the concept of PAHO's Program of Human Resource. The data have been obtained from the World Health Organization (WHO), PAHO, the International Labour Organization (ILO) and the Inter-American Development Bank (IDB), from investigations, reports of events, web portals, professional nursing bodies, and newspaper and magazine articles. The information gathered reveals shortages, inadequacies, poor registration of basic data and disparity in years of information. This proves the importance of monitoring the dynamics of the nursing workforce and of producing evidence on the key aspects on which there is currently little or no information.

The nursing workforce remains unbalanced, limited and inequitable in relation to health care requirements. The ratio of qualified nurses to population is low, while those of assistants and auxiliaries are high, as they are responsible for nearly all of direct care delivery. There are few professionals working in primary health care. This model requires a rethinking of the criteria, policies and strategies in order to guarantee quality health care. Processes for assigning trained nursing personnel equally among all population areas and for professionalizing auxiliaries and technicians must be extended.

Today, the indicator of nurses per 10,000 inhabitants shows a range between 3.5 in Haiti and 79.2 in Cuba. According data from the Overview of the Nursing Working Force in Latin America (2005), indicators in South American countries vary between 1.2 in Paraguay and 7.9 in Venezuela. In Central America, the Hispanic Caribbean and Mexico the greatest disparity, ranges from 39.5% in Mexico to 82.0% in Guatemala. The average for nursing auxiliaries in the sub-regions is: Southern Cone 77%; Andean area 72%; and Central America 70%. Mexico is the country with the highest proportion of nurses (61.5%), while Uruguay has the lowest proportion (12.2%). In the Southern Cone, the proportion of nursing auxiliaries varies between 62.3% in Argentina and 87.8% in Uruguay. Unfortunately, the situation in the recent days is not very different from that time, when that document was published, and the nursing resources to attend to populations lies predominantly in the hands of staff with basic training.

Regarding the work conditions, the most frequent pattern of work is 8 hours/ day and 45 hours/week (range: 6 hours/day and 30 hours/week to 9/hours a day and over 50 hours/week). Salaries are generally low and vary from country to country, the average in Latin America is US\$ 400-500 per month for nurses, while it is 30% less for nursing auxiliaries. The majority of nurses enjoy social and salary

benefits: medical insurance; different kinds of incentives, depending on disadvantaged geographical areas, risky or dangerous work; age; professional qualifications; and others.

Nursing education varies from country to country. The university level is likely the most homogenous, generally, with a Bachelor degree, which confers a higher education qualification (4-5 years). However, there are other programs: diploma (2 1/2-3 years) and technical-level nursing (2-years). In 2004 was reported that there were 1,792 nursing programmes in Latin American countries, of which 988 were university courses. The majority of countries are developing an abundance of courses for nursing auxiliaries, regularly linked to non-university institutions, with varying admission requirements and between 6 to 18 months in duration. There are also technical high-school diploma programmes (second phase of middle school aimed at nursing). The university teaching staff at the majority of schools has no post-graduate training. However, there are important training centers, which offer post-graduate level, master, PhD and specialization programmes. In particular, there are doctorate programmes in Argentina, Chile, Colombia, Venezuela, Brazil and Mexico. Many Latin American Colleges of Nursing belong to the *Asociación Latinoamericana de Escuelas y Facultades de Enfermería* (ALADEFE). In relation to the production and dissemination of nursing knowledge, the organization of research into groups, lines, programs and research centers is recent, with the exception of Brazil and Colombia, which have longer traditions. Two very well recognized Colleges of Nursing at those two countries are WHO Collaborating Centres for Nursing, and also hold Chapters from Sigma Theta Tau International Honor Society of Nursing. Scientific production is strongly related to post-graduate education, which favours the training of researchers and the creation of a critical mass able to generate new knowledge. However, highly scientific international publication of investigations in Spanish and Portuguese remains weak.

With respect to nursing organizations, nursing in the Americas relies upon the full and active development of professional entities. The PAHO study, entitled *Panorama de las Organizaciones de Profesionales Trabajadores de la Salud en la Región de las Américas* ("Overview of Organizations for Professional Health Care Workers in the Americas") emphasizes that "this category of professionals is the only one present in all countries and indicates that professional nursing groups show a tendency to be integrated into international structures; they are conducting active campaigns to give dignity to the profession. For the most part, these organizations are members of ICN, and 19 of them belong to the *Federación Panamericana de Profesionales de Enfermería* (FEPPEN). There are national associations for nursing professionals in all Latin American countries

A common identity and uniting nursing culture must be encouraged among Latin American nurses. Changing nursing culture and fostering a broader nursing role in Latin America calls for political will for change, which can only be realized through multifaceted support from government officials, policy makers, hospital directors, medical personnel and nursing faculty, in addition to a change in perspective on the part of professional nurses.

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- Genetics services

In the 1930-40s, a few North American geneticists visited South America and helped the development of research centers in cytogenetics and population genetics mainly in Brazil and Argentina. In the 1950-60s, human genetics was established in those two countries, also in Chile. Several very well recognized Latin American geneticists reported new genes and diseases, also they had the opportunity to study in USA, UK, France, Italy, Germany and Spain, and a couple of strong transnational collaborations began at those times. Some Latin American countries recognized the specialty of clinical genetics before many European and other countries, among them is Brazil, which became a solid center for the development of human and medical genetics in Latin America. However, social inequalities, as they are manifested in Latin America, create barriers in access to genetic services, which may increase and come along with the technological advances.

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