Transition of nursing professionalizing Mexico

Abstract

Introduction: Nursing has undergone major changes, from being a profession to profession and ceasing to be eminently feminine. The coexistence of various degrees recognized in the workplace has prevented the achievement of his social position as a profession.

Objective: To clarify the status of the transition from nursing the professionalization of Mexico from 2009 to 2018. Development: A descriptive, retrospective ecological study, obtaining information from registered nurses nationwide system management information Nursing Workforce, Mexico from 2009 to 2018. Simple frequencies were obtained and trend analysis was performed by the method of least squares.

Results: The number of nurses has tripled in the period. 14.2% of the total for the male. Technical staff prevails with 56.8%. The Health Ministry concentrated 40% of human capital in nursing. Technical staff decreases and increases professional.

Conclusion: It is necessary to mark differences in academic nurses, standardize in all health institutions the requirement title and professional certificate degree in nursing for a place general nursing, as well as postgraduate studies for specialist. A 40 years into the degree in nursing in Mexico, has not been able to stop the training of technicians in nursing, which greatly hinders the scope of nursing profession as an independent, autonomous, based on their own theories.

Keywords: nursing staff, nursing education, postgraduate education

Abbreviations: IMSS, institute mexican social security were considered; ISSSTE, institute of security and social services for state workers; MISHRN, management information system human resources nursing

Introduction

Speaking of professionalization in nursing, is talking about a complex social process of changing a label firmly affixed in society conceptualization, is thinking about changing a job whose knowledge is passed from generation to generation of an empirical and informal way to a profession, science-based, theories and models of care, with higher-level schools aimed at training professionals with technical, procedural, cognitive and values among others, that give meaning to the profession. From the nineteenth century, they kicked off attempts to provide specific training to women who dedicated themselves to caring for the sick in hospitals.1 Currently, nursing involves the exercise of what is considered a science and turn an art.2 In Mexico, the process of training nurses began in the late nineteenth century with a scheduled training project conducted by nurses from the United States and Germany.3 The creation of the School of Nursing at 1907,4,5 who created the first program nurse training, same as in 1929, became a program with duration of three years. The midwifery training program was developed with a training period of two years, with the requirement of minimum academic requirements for admission. In 1935, it was established as a requirement for nursing studies, the completion of secondary education. Studies defined as specialty, they began at the General Hospital of Mexico in 1937 with specialties in anesthesia and dietetics, being required to enter these courses have the title of enfermera.6 In 1938, he began the course instrumentalist and in 1941 the Pediatric Nursing. Bachelor of Nursing began in 1967, characterized by slow development, low demand and terminal rates very encouraging efficiency. The first generations were located in the areas of academic training as teachers and to a lesser extent in research areas in inpatient care predominated participation enfermera6 technical and auxiliary nurses. In the late twentieth century graduate studies began nursing specialty and Curriculum Master Program in Enfermería7 was approved in 2002. In 2003 he began a PhD in Nursing Sciences at the School of Nursing of the Autonomous University of Nuevo Leon, the first of its kind in the country and in America in hispana8 speaking countries. However, the phenomenon of transition from professional technical level has been slow and prolonged, with different levels of academic training that are established in the Mexican10 Regulation, observing that to identity of nurses differs from its social image, invaded stereotypes that give a dependent image of the doctor and little professional.11

Academic levels

Currently recognized academic standards in Mexico are three, the upper half, upper and posgrado.12 With formation characteristics differing in time, objectives and skills from upper middle level (high school) to higher level, represented by the degree and graduate. Mexican Official Standard NOM-019-SSA3-201310 to practice nursing in the National Health System defines as a nurse (o): A person who has completed his higher level studies in the area of nursing, in some institution belonging to the national education system and has been issued identity card exercise patent purposes by the competent educational authority to practice nursing professionally. Nurses classified as professional and non-professional. Defines the former as one who “has completed higher studies in the area of nursing, in some belonging to the national education system educational institution and obtained professional certificate. This category includes nurse specialist, with expertise and nurse with doctorates, technical nurse,
nursing technicians and skilled nursing technician. Nurse considers not the person who has not completed his academic training in the area of nursing or has not obtained a document showing that the competent educational authority authorizes staff to exercise this activity. In this classification are the nursing assistant, You do not have the exact number of schools that offer career technical nursing in the country, but it is estimated that there is around a school level degree by four technical level, of which approximately 50% are private programs precarious education, compliance with quality standards set by the authorities in the field not always been met. This difference and plurality of levels has meant that there are professionals with different academic training, skills, abilities, knowledge, skills, and different and with varying degrees of use of scientific and technological advances critical judgment, which affects the professional image, social and professional recognition and quality of participation of nurses.

At the institutional level, the situation in relation to recruitment, assignment payments and does not favor the professionalization. Only some educational and health institutions have catalogs of positions and job profiles for nurses according to different degrees, but not all institutions establish a clear distinction between the responsibilities to be assumed by each professional according to their academic training. On the other hand, el salary between different degrees no significant differences, so studying nursing at university level is unattractive when it has the opportunity to finish the race técnica,13 which provides graduates employability. Given this problem, this study was done with the aim of clarify the status of the transition from the professionalization of nursing in Mexico from 2009 to 2018.

Methodology

A quantitative, descriptive, retrospective ecological study was conducted to obtain information from records Management Information System Human Resources Nursing (SIARHE)1 Mexico

Results

The number of nurses in Mexico who were working in 2006 was 103,891. In 2018, 299,168 records nurses, various degrees are. It is showing that the number of registered nursing staff has tripled over the period studied (Table 1).

Table 1 Number of nurses in Mexico 2009-2018

| Academic level         | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Assistant              | 31,722| 31,703| 31,800| 30,485| 30,132| 31,776| 31,262| 30,787| 30,593| 29,132|
| Technical              | 98,704| 1,03,619| 1,08,770| 1,05,229| 1,04,333| 1,21,407| 1,22,490| 1,22,762| 1,22,515| 1,20,300|
| Technical pos courses   | 19,095| 20,375| 21,361| 20,127| 20,377| 24,050| 24,399| 24,314| 23,765| 23,040|
| Nursing and Midwifery  | 10,438| 12,621| 14,056| 13,660| 14,766| 18,834| 19,647| 20,115| 20,754| 21,322|
| Degree in nursing      | 29,301| 34,189| 39,041| 40,882| 46,828| 62,107| 68,873| 75,899| 81,937| 88,768|
| Specialty              | 2,768| 3,283| 3,744| 3,844| 4,477| 6,096| 6,878| 7,822| 8,585| 10,282|
| Master’s degree        | 1,107| 1,375| 1,600| 1,781| 2,266| 2,224| 3,843| 4,461| 5,019| 6,004|
| Doctorate              | 50    | 59    | 61    | 67   | 105  | 137  | 179  | 212  | 256  | 320  |
| Total                  | 1,93,185| 2,07,224| 2,20,433| 2,16,075| 2,23,284| 2,67,631| 2,77,571| 2,86,365| 2,93,424| 2,99,168|

Source Siarhe 2018

At the same time, the nursing profession is no longer totally feminine, allowing the inclusion of male professionals, it has presented a slight but steady increase. In 2009 (the oldest data recorded) the proportion of men was 8.96% for 2018, this amounted to 14.2%.

The nursing union has not only grown in terms of numbers, it has also had significant changes in relation to education. The distribution of nurses shows an increase of personnel with higher level studies of 2009 to 2018.

Online through consultations based on SIARHE, about, sex, location and academic institution of registered nurses each year throughout Mexico was obtained. The platform provides the total number of nurses since 2006, however, the characterization of staff for the variables studied is from 2009.

The total number of registered nurses each year according to established variables analyzed. Were classified as professionals registered, those who have higher studies, which includes undergraduate, specialization, master’s and doctoral nonprofessional, those whose highest level of education is technical level or technical pos. We proceeded to the comparative analysis of the variables studied from 2009 to 2018, identifying changes in annual cohorts from 2006 to 2018. To study the distribution by institution, the most representative institutions of the country -Institute Mexican Social Security were considered (IMSS), Institute of Security and Social Services for State Workers (ISSSTE) and Ministry of Health (SS) - which by the amount of people they serve, most nurses. linear trend analysis of the proportions of professional staff (bachelor, specialty, master’s and doctoral) and non-professional staff (auxiliary, technical and Technical pos courses) to do so, using the Excel® program was a straight calculated adjusted by the least squares method to the values of the matrices defined by the number of registered professionals from 2009 to 2018 and 100% of the group of professional personnel, obtaining the year, according to the presented behavior, 100% of staff nursing in Mexico to have professional education, which full profesionalizació14 be achieved.
The proportion of professionals with studies post-technicians has begun to decline, while professionals with graduate (specialization, masters and doctoral) tend to increase: with specialized studies, a 2.0% increase, masterfully 1.43 % and 0.08% doctorate (Table 2).

### Table 2 Distribution of human capital in nursing education as 2009-2018

| Academic level                      | 2009 | 2018 |
|-------------------------------------|------|------|
|                                     | n    | %    | n    | %    |
| Assistant                          | 31,722 | 16.4 | 29,132 | 9.7 |
| Technical                          | 98,704 | 51.1 | 120,300 | 40.2 |
| Technical pos courses               | 19,095 | 9.9  | 23,040 | 7.7 |
| Nursing and Midwifery              | 10,438 | 5.4  | 21,322 | 7.1 |
| Degree in nursing                  | 29,301 | 15.2 | 88,768 | 29.7 |
| Specialty                          | 2,768 | 1.4  | 10,282 | 3.4 |
| Master’s degree                    | 1,107 | 0.6  | 6,004  | 2.0 |
| Doctorate                          | fifty | 0.0  | 320    | 0.1 |
| Total                              | 193,185 | 100.0 | 299,168 | 100.0 |

Source: Siarhe 2018

By grouping the non-professional staff (auxiliary, technical, technical pos) and professional (Bachelor, specialization, master’s and doctoral) is observed during the study period inversely proportional, slow but steady change, manifested by an increase in professional and a decrease in the non-professional (Table 3).

### Table 3 Professional and non-professional staff distribution

| Year | No professional staff | Professional staff |
|------|-----------------------|--------------------|
|      | Num | %    | Num | %    |
| 2012 | 155841 | 72.1 | 60234 | 27.9 |
| 2013 | 154842 | 69.3 | 68442 | 30.7 |
| 2014 | 177233 | 66.2 | 90398 | 33.8 |
| 2015 | 178151 | 64.2 | 99420 | 35.8 |
| 2016 | 177863 | 62.1 | 108502 | 37.9 |
| 2017 | 176873 | 60.3 | 116551 | 39.7 |
| 2018 | 172472 | 57.7 | 126696 | 42.3 |

Source: Siarhe 2018

Trend analysis shows that follow in this constant, equal proportions between professional and non-professional will be reached in Mexico in 2022, reaching professionalization all by the year 2047 (Table 4).

### Table 4 Trend professional and non-professional staff in Mexico

| Year | No professional staff | Professional staff |
|------|-----------------------|--------------------|
|      | Num | %    | Num | %    |
| 2012 | 72.12 | 27.88 |
| 2013 | 69.35 | 30.65 |
| 2014 | 66.22 | 33.78 |
| 2015 | 64.18 | 35.82 |
| 2016 | 62.11 | 37.89 |
| 2017 | 60.28 | 39.72 |
| 2018 | 57.65 | 42.35 |

Source: Siarhe 2018

The nursing staff focuses on the country’s health institutions and trainers nursing schools. From 2009 to 2018 the distribution has remained substantially unchanged. The Ministry of Health is the institution that concentrates the highest percentage of nurses, absorbing 40%, followed in descending order the IMSS (35%) and ISSSTE with 8.42%. Focus schools 2% of professionals and private medical services 3.6%. 11% are in institutions that provide health services to limited population groups such as Petroleos Mexicanos (PEMEX), Ministry of National Defense (SEDENA), Secretary of the Navy (SEMAR) among others are (Table 5).

### Table 5 Distribution of human capital by institution

| Institution | Proportion of total of nurses |
|-------------|------------------------------|
| Health secretary | 40% |
| Imss        | 35% |
| Issste      | 8.4% |
| Private services | 3.6% |
| Schools    | 2.0% |
| Others     | 11.0 |

Source: Siarhe 2018

With regard to sex, nurses in 2006 represented 7.3% of the total in 2018, this figure rises to 14.2%. Occupy 18.4% of the seats in the IMSS, ISSSTE 11.05% and 15.39% in schools. This proportion has
increased over the period studied, with the IMSS the institution that has a greater increase and a higher proportion of male staff.

Nursing staff with technical training prevails in hospital and health both government and private institutions, only in different proportions.

Of governmental institutions providing health services, IMSS is the institution with a higher proportion of staff technical level with 68.7%; the ISSSTE has 73.2% and 68.7% SS. In private institutions, 75.6% is not professional. In educational institutions it is where there is a higher proportion with professional studies (bachelor’s, master’s and doctoral), taking almost 80% of its staff with higher level studies.

Discussion

The social construction that nursing is an art that any woman has hindered the development nursing as profesión. Despite the inclusion of professional male, it is still predominantly female, limited by the sexual stigmatization.

In Mexico, the socio cultural context has limited the achievement of the professionalization of nursing wholly, the co-existence of technical and professional training levels in the same discipline that has favored institutions give as much or more validity to the technical pos courses as specialties for obtaining specialist staff working spaces.

For graduate studies have not yet defined in hospitals and health specific positions that require professionals with the profile institutions, so that graduates of master’s and doctoral are placed in institutions of higher education and/or institutions where research is conducted in the area of health and heads of teaching hospitals.

These situations have contributed to postgraduate training in nursing have little demand, it unattractive for professionals and little recognized social and institutional levels, resulting in a heterogeneous formation of discipline, which undoubtedly affects the quality of care provided and the level of professionalism achieved and the interaction of nurses with other professionals and achieving the same level of interdisciplinary.

Current conditions point to the development of the National Health System, the introduction of new technologies in the prevention, diagnosis and treatment of diseases, development of information technology in administrative and patient care processes, also has been progress in the knowledge of biotechnology, innovations in education and health require human talent training to meet these challenges, by what it is essential to improve the training of professionals, which undoubtedly is related to higher education that aims at the formation of human capital with high levels of knowledge, skills and abilities that allow them to improve health care. While it is true there are generating educational institutions of human capital in nursing at the technical level, they do not provide the student with elements that allow cognitive development for sound decision-making, nor the skills to conduct research or to make use of it or to provide care with sound science or thought critic. The skills acquired by professionals at a senior level, are indispensable to that respond to the need to provide humanized care, focused on the individuality of people based on the implementation of the Nursing Care Process (SAP).

To achieve professionalization, it is necessary to stop the training of technical personnel and technical pos, especially that is provided by government educational institutions through the design and implementation of public policies that put nursing as a profession, leaving to produce human capital training focuses on a single pillar of education (skills). Thus dignifying the science of care and nursing care quality it will be improved.

Conclusion

In our country, the socio cultural context has not allowed achieve full professionalism, to ensure scientific recognition, as in other professions, the nursing profession does not have the same level of social recognition that other disciplinas.

The transformation of the social image of nursing has been a slow process, determined by the perception of the population of professionals, who often influenced by their experiences (pleasant or not) in different environments where people are atención.

It is necessary to encourage nurses committee to increase awareness and commitment to critical thinking and ethical conduct to provide care quality and efficiency to the entire population, thus contributing to the implementation of health policies and the achievement of objectives and national and international goals and promote reforms that favor the legitimization and recognition of nursing as a profession.

A 40 years into the degree in nursing in Mexico, has not succeeded in eliminating the formation of nursing technicians. From the academic side, this level is the lowest, requires schooling of high school level and develop curricula and learning units added to those that make up the curriculum of high school. This level has characteristics that prevent nursing training. Graduates of these programs barely reach the age of majority, however, and because it is considered a technical profession, obtain professional license and have the same job opportunities that graduates of bachelor, who to obtain a license enrolled, plus upper secondary education, four years constituting the undergraduate program. To achieve the full professionalization should stop training technicians, eliminate the option of nursing curriculums technological high schools, both government and private and standardize all hospital and health institutions demanding title and professional certificate degree in nursing for a place general nurse.

Acknowledgement

None.

Conflicts of interest

The authors declare no conflicts of interest or contradictions in results or topics presented in this article provides an overview of the current situation of the nursing profession and partially explains the slow progress towards professionalization.

References

1. http://www elsevier es/es-revista-revista-administracion-sanitaria-siglo-xxi-261-articulo-pasado-presente-futuro-enfermeria-una-13139761
2. Trejo MF. Nursing: from art to science or science to art. Enf Neurol (Mex). 2013;12(1):95–97.
3. Castañeda GM, Loredo DL, Perez CI, et al. Vocational nursing during the first half of the twentieth century in the UNAM. Nursing Journal ENEO-UNAM University. 2010;7.
4. Donahue, PM Cárdenas Becerril L. Professionalization of nursing in Mexico. History of nursing. eds. Elsevier. Barcelona Pomares, Mexico; 1988

Citation: Hernandez-Marquez C, Arizmendi EJ. Transition of nursing professionalizing Mexico. Int Phys Med Rehab J. 2019;4(5):255–259.
DOI: 10.15406/ipmrj.2019.04.00212
5. Garcia C. History of nursing. Historical evolution of nursing care. Harcourt, Madrid, Spain; 2001.

6. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-70632010000500005&lng=es

7. Rubio DS. Professionalization of nursing in Mexico. Mexican Journal of Nursing Cardiology. 2010;18(1-2):4-6.

8. Government of the state of Mexico. mexiquense bicentennial library. evolution and development of nursing. Life=health. Largest collection of the state of Mexico. Heritage of a people. 2008.

9. http://enfermeria.uanl.mx/oferta-educativa/doctorado-en-ciencias-de-enfermeria/

10. http://dof.gob.mx/nota_detalle.php?codigo=5263263&fecha=13/08/2012%20%5bAccessed%2012/12/2018%5d

11. Calvo CM. Social image of nurses and public communication strategies to achieve a positive image. Index Enferm [Internet]. 2011;20(3):184–188.

12. Orozco RO, Nunez OS, Omar FO, et al. Factors associated with the professionalization of nursing in Mexico. Rev Conamed. 2015;4.

13. http://www.ssm.gob.mx/portal/index.php/noticias/9-programas/58-sistema-de-informacion-administrativa-de-recursos-humanos-de-enfermeria-siarhe

14. bvs.sld.cu/revisitas/enf/vol25_1-2_09/enf101_209.html

15. Delors J. The four pillars of education. Digital repository of the university of cuenca. 2013.

16. Agramonte SA. Ethical implications of using applications in the management of nursing care. Rev Cubana enfermer [Internet]. 2013;29(3):199–209.

17. Errasti IB. Arantzamendi SM., Canga AN. The social image of nursing: a profession known. Anales Sis San Navarra [Internet]. 2012;35(2):269–283.

18. Mora GL. Ethical and bioethical principles applied to the quality of care in nursing. Cub Oftal Rev. 2015;28(2).