Original Article

Health Care and Nursing Education in Spain

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Abstract

Introduction: As in other European countries, the Spanish National Health System is based on principles of universality, free access, equity and fairness. Yet, despite marked budget constraints linked to the global financial crisis, the national health system remains almost universal, covering 99.1% of the population.

Aim: To expand on the healthcare and nursing education systems of Spain and elaborate on health care settings, delivery of care and levels of nursing education.

Methods: This was a critical reflective literature review that utilized key references. Key-words were used separately and in combination within the last two decades via Medline and Scopus databases, included: Spain, Healthcare Organization, Bologna Process and Nursing Education yielding an abundance of resources that was reduced to 43 key references.

Results and Discussion: Results have been organized under the broad categories of Health Care structure and delivery then Nursing Education and will be presented via inter-comparative narration. The essence of primary health care in Spain is mainly based on three key factors: Accessibility, Longitudinality and Continuity and these were further elaborated via the following sub-headings: The health care system in Spain, School Nursing, Home Care Nursing, Problems in Community Nursing and Nursing Education in Spain.

Conclusions: The Spanish healthcare system aims to ensure universal and free access with equity and fairness. Nevertheless, some structural reforms are still required to improve chronic care management and the reallocation of resources especially in the community care sector. However, marked inequalities in self-reported health have declined recently, showing increased system performance and impact.

Key Words: Spain, Healthcare Organization, Bologna Process and Nursing Education

Introduction

Healthcare systems have existed since communities deliberately tried to protect their health and treat diseases in an organized manner. Throughout human history, diseases, plagues, massive accidents and war have markedly affected health status.

The health systems of today were created using optimum models, i.e. several basic health plan designs that have been improving continuously. Thus, with rare exceptions, modern healthcare systems have been organized mainly since the last century.

An optimum healthcare system is intended to cover the entire population of a country through compulsory employer and employee social welfare contributions to public insurance organizations, while the services are provided by both public and private health care providers. Within this context, primary health care is immersed in wider governmental public health policies (Avanzas et al., 2017).

According to Kruk et al., (2018) a healthcare system is "a complex of interrelated elements that contribute to health in homes, workplaces, public places and communities, as well as in the physical and psychosocial environment, and the health sector or other related sectors".

The core values of any healthcare system are:

- Universality: all individuals must have rights to health protection and access to healthcare services.

- Comprehensive care: the healthcare system must include preventive and health promotion as well as healing and rehabilitation aspects.

- Suitability or relevance: the healthcare system must respond to the real needs of the population and adapt to them.

- Equity: the healthcare system must give equal treatment and accessibility to services for all the inhabitants.

- Functionality: the healthcare system must cover or satisfy a need.

- Efficacy: the healthcare system must achieve what was planned. It must strive to solve the health problems of individuals.

- Efficiency: good relationship between the efficiency achieved and the expenditure made to achieve it, i.e. financial viability.

- Community participation: the healthcare system must articulate the way in which citizens can participate actively in its functioning. This is usually done through Patient Associations.

Similar to other European countries, the Spanish National Health System (Sistema Nacional de Salud; SNS) is based on the principles of universality, free access, equity and fairness of financing. Yet, despite marked budget constraints linked to the global financial crisis, the national health system remains almost universal, covering 99.1% of the population.

Aim: The purpose of this critical reflective narrative is to expand on the healthcare and nursing education systems of Spain. More specifically we elaborate on health care settings, delivery of care and levels of nursing education.

Methods

This was a critical literature review that utilized key references; It was designed to provide an overview of sources using an organizational pattern that combined

both summary and synthesis, within the specific conceptual categories of Healthcare Organization and Nursing Education.

Key-words were used separately and in combination within the last two decades via Medline and Scopus databases, included: Spain, Healthcare Organization, Bologna Process and Nursing Education.

As the initial search yielded an abundance of resources (>856), a re-organization and reshuffling of the results was performed in order to achieve a summary of the important information of the sources until data saturation was achieved and narration synthesis was reduced to 43 key references.

Results and Discussion

Results have been organized under the broad categories of Health Care structure and delivery then Nursing Education and will be presented via inter-comparative narration.

The health care system in Spain

The Spanish National Health Care System is a modeled on decentralized competencies and financed by Autonomous Communities within 17 Health Service sub-organizations. However, these are still regulated by the Inter-territorial Health Council, a state competition body under the Ministry of Health. The National Health Care System is the preset of all the public health services which have existed since the General Health Law (General de Sanidad - GdS) Law 14/1986 which established some core characteristics of the GdS:

- The scope of all services aims to serve the entire population.

- The GdS provides complete health care in terms of health promotion and disease prevention as well as treatment and rehabilitation.

- Coordination and integration of all the resources.

- The financing of all resources will be made by subventions, contributions and fees

for certain services.

- The provision of high quality level health care.

Spanish hospitals have 157,665 beds in total (3) accounting for less than 4 beds for every 1,000 people, which is less than a half of the WHO recommendation (8-10 beds/1,000). The distribution of hospitals is as follows: 41.2% private (for profit), 40.7% civil public, 15.2% private (non-profit), 2.5% maternity (where there is a department to prevent postpartum hemorrhages), 0.3% military hospitals. The distribution of beds in the different hospitals is as follows: 66.3% civil public, 20.3% private (for profit), 12.2% private (non-profit), 0.8% maternity, 0.4% military hospitals (García-Armesto et al., 2010; Bankauskaite & Novinskey, 2010).

The overall structure of the Spanish National Health System is as follows:

● Health Area Boards: these take responsibility of the united management of all the health centers and establishment of autonomous communities of Spain. The priorities of health area boards are based on: geographic, socioeconomic, demographic, cultural, environmental, infrastructure (roads and means of communication) and population health demands (between 200,000 and 250,000 inhabitants). The later rule is one which it is used the least because, for example, in Madrid, with millions of inhabitants; there is only one health area board. This means that everybody can choose

his/her healthcare center and hospital with no geographical or other restriction. (Arias et al., 2010).

- The Inter-territorial Council of the Spanish National Health Service is the most important organization of general coordination in relation to health between the Central State and the autonomous communities.

- The Ministry of Health is the organization of central administration which executes and plans health assistance, the health politics and the reduction of the use of drugs and their consequences.

Therefore, the Spanish National Health System is organized in a two tier system as follows:

- Primary Healthcare: responsible for illness prevention, assistance through protocols to chronic disease and acute conditions.
- Specialized care: delivered in specialized centers and hospitals (outpatient or in-hospital treatment).

As Spain is a country with over 46,420,000 inhabitants, occupying 14th position in the world's economic ranking, its public health system is financed by taxes and provides healthcare coverage to almost the entire population. There is no added paid system for medical attention, although an economic contribution must be paid for medicines that are acquired and this is consistent with patient financial circumstances.

Yet, a significant private health system coexists with the public system (Bernal-Delgado et al, 2018). With the arrival of democratic rule in Spain, an increased health access system was adopted at the end of the 1970s. Prior to this, Spain did not include the specialization of Family and Community Medicine.

Another important fact was the global awareness, more so in developing countries, supported by the Alma-Ata International Conference on Primary Health Care (which highlighted the importance of primary health care in obtaining the best level of citizen health:

Health for all in the year 2000), ensured that countries like Spain focused on developing primary health care (Forriol & Vaquero, 2012; Lopez-Valcarcel & Barber, 2017).

Since then, and structured by the General Health Law of 1986, primary health care has been organized in health centers (both urban and rural), which provide service to 5,000 to 25,000 inhabitants, depending on their geographical dispersion.

These centers are equipped with family doctors, pediatricians, nurses, midwives, physiotherapists, dentists, social workers psychologists and administrative staff. Health centers have a team of highly qualified nurses (four-year degrees required) and patients are assigned to a doctor and nurse who work together on the treatment of each individual (generally doctors are assigned to full family units).

The average population attended to by a primary health care doctor in Spain is 1,500 inhabitants, Each health centre has a reference hospital centre (the number of centers attended to by each hospital varies based on the size of the centre, the number of inhabitants and the area's geography) to which it sends patients for complementary complex tests or to visit another medical specialist. The National

Health System has 3,039 health centers, which comprise of 10,055 consulting rooms (Gervits & Anderson, 2014; Arrazola-Vacas et al., 2015).

Health centers have become places with a high capacity to resolve health issues as they are equipped with a series of complementary tests that favor full treatment of 80% of patient pathologies.

They can organize analysis of bloods and other tests, smear tests and biopsies. They also have electrocardiographs and more centers are equipped these days with ultrasound machines and endoscopic units. When an imaging test is required, the patient must visit the radiology service at the corresponding hospital and the x-ray will be sent to his or her family doctor (telemetrically in almost all cases) who will offer a diagnosis and prescribe treatment (Pons-Vigués et al., 2017).

The greatest weight of prevention and promotion of health falls upon primary health care; diagnosis and treatment of acute illnesses, monitoring of patients with chronic conditions, pregnancy monitoring and monitoring of normal development in childhood stages are all performed at health centers.

Primary health care maintains a continuous care system 24 hours a day, covered by special shift teams that may also include regular care doctors. The communication system (for complementary tests, clinical history, hospitalizations, etc.) is fully computerized and telematic communication is increasingly integrated between the hospital system and primary health care (Sánchez-Recio et al., 2020; Cernadas et al., 2022).

The essence of primary health care in Spain is mainly based on three key factors: Accessibility, Longitudinality and Continuity.

***Accessibility*:** in geographical terms, marked by the proximity in distance between resources and the population, as well as in terms of time: it is generally deemed unacceptable that a patient must wait more than 48 hours to see his or her doctor following an appointment (Martin-Arribas et al., 2022).

***Longitudinality*:** refers to the fact that a patient is known by his or her doctor for years and the doctor perceives changes in the patient's health in a more precise manner; better accessibility provides better monitoring of the patient's diseases (Coronado-Vázquez et al., 2019).

***Continuity*:** the family doctor becomes the coordinator of all pathological processes of patients, coordinating all hospital specialists who attend to the patient as they each inform the other of variations in the patient's treatments and the development of his or her diseases (Romero-Ventosa et al., 2016).

Hospital specialists have the patient's history, but this is not integrated with his or her primary care history. In this context, this improves patient safety and reduces the cost of treatment as complementary tests are not repeated and knowledge of the patient's health status is more effectively transferred (Costa et al., 2019.

Yet, public health care remains an essential element of concern as health system coordination remains relatively poor in providing guidance on addressing chronic conditions and lifestyle factors such as obesity, smoking and diabetes (García, 2022).

School Nursing

The role of the school nurse has been introduced in several European countries for decades, either full-time or dividing their working hours between a Healthcare Center and a primary school or similar educational facility (Martínez 2011).

In Spain, this service is still expanding, with most exemptions being special education centers and some private schools, despite that the school is the place where children spend most time every day (Rodríguez-Almagro et al., 2018).

The Ministry of Education has been criticized for not prioritizing full formalization of this role. Nevertheless, the Spanish General Council of Nursing insists that school nursing "is a real need" and criticizes that in Spain more emphasis is given to acute hospital care than on school community services.

The most common cases that school nurses face are childhood diabetes, neurological disorders, asthma, bronchitis, choking or even cardio-respiratory arrest. But apart from such direct attention, school nurses also work in health education, such as teaching children how to perform cardio-pulmonary resuscitation and other first–aid initiatives.

That is why the presence of nurses in schools is an investment in the future, providing health awareness and prevention training for children (Ruiz Muñoz et al., 2015).

Home Care Nursing

The Spanish primary health care is organized into structured health centers with multi-professional teams, composed of doctors, nurses and other healthcare professionals specializing in family and community health (Gofin & Foz, 2008).

As the Spanish healthcare system evolves, new concepts of collaborative tasks amongst the home healthcare team as well as advanced nursing roles have been established (Jean et al., 2019). Thus, by clinical collaboration, nurses are primarily responsible for health prevention, promotion and delivery of services to the chronically ill in stable conditions (Puigvila et al., 2011).

However, the implementation of these advanced nursing tasks has been limited by a number of factors, i.e.: role uncertainties, marked disparities between autonomous communities, and central or local legislation disparities (Mármol-López et al., 2018).

Overall, it is widely accepted that more education structures and legislations are required in order to enable home care nurses to develop their full clinical potential (Hämel et al, 2020).

Thus, currently in Spain the role of these liaison nurses is important as they ensure continuity of care assistance between Tertiary and Home/Community Care, initially by assessing the situation of patients during hospital discharge and the patient's potential needs at home (Oltra, 2009).

In addition, the liaison nurse's role is to prioritize actions in those groups most vulnerable to health problems, especially in people with mobility problems and advanced age who suffers from chronic or terminal conditions. However, this clinical role is still developing as there is a shortage of care staff, specialized in the public Health Care Service (Bernabeu-Mestre et al., 2013; Ferrer-Arnedo, 2020).

Problems in Community Nursing

In Spain there are still some problems related to primary care delivery and are described below:

❖ Children's care

The definition of childhood has been incomprehensibly lengthened from 14 to 18 years. Although community Pediatricians roles have been extended for rural areas, criticisms sustain that the logical direction would be in the opposite direction, i.e. to have a General

Practitioner or a Family Doctor to attend to individuals from birth within the specifics of their family circumstances.

Moreover, Pediatricians in primary care in Spain mainly evaluate healthy children, when they should be the counselors of General Practitioners for certain health problems (March et al., 2014).

❖ **Pregnancy and healthy childbirth**

The obstetricians have been accused of implemented protocols without solid scientific basis, so that the family doctor has limited input on pregnancy issues and normal delivery.

These two situations are the scope of work of the family doctor, and should be delegated accordingly (Blanco et al., 2022).

❖ **Care for menopausal women**

Menopause is currently regarded as a 'pathological state' which is to be 'treated' in 'menopausal units'. Again, much criticism has been placed upon the lack of strong scientific basis for such an approach.

The logical and more practical approach would be that problems associated with menopause should be treated by the Family Doctor.

❖ **Care for patients with AIDS**

Patients with AIDS in Spain depend on hospital services for medication, which may stigmatize them as anonymity is not always assured.

An alternative approach would be that the diagnosis and monitoring of AIDS patients is done in primary care wherever there are appropriate specialists available. Some consider it better for private pharmacies to dispense the necessary medications.

❖ **Care for patients with coagulation problems**

Anticoagulation is increasingly common in daily practice and for many patients it would be better not to receive care which is controlled by hematologists in laboratories and environments outside of primary care.

This is a field for primary care (doctors and nurses) in which patient control of their daily living should be encouraged, either by the patient per se, or a family member (Rodríguez-Martínez et al., 2019).

❖ **Care for terminal patients at home**

Terminally ill patients often prefer to die at home; in such cases, assistance should be provided by primary care, but it is increasingly common for the patient to leave the hospital with the 'terminal care unit' as a service provider.

The logical thing is that the home care of terminal patients is the responsibility of primary care and the help of other networks, professionals and specialists is required under the same conditions and circumstances that apply to other patients (Sánchez-García et al., 2017).

Nursing Education in Spain

As in other developed countries, nursing education and practice in Spain is influenced by rapid health care changes.

Thus, nursing education in Spain has been developing rapidly in accordance with the European Union initiatives and within international global educational standards (Zabalegui et al., 2009; Arrogante, 2017).

In Spain, up to 1977, the only academic recognition for nursing education was a three year diploma qualification.

Nurses had to move into other disciplines in order to achieve academic

growth or advance their nursing studies abroad.

The integration in 1977 of nursing studies at University level was a key point in the transition of the nursing discipline from a technical to a professional stage (Paduano, 1976; Lazcano et al., 2022).

It was at this moment when a new concept of health emerged and it became clear its relationship with the quality of life of people, which would be reflected in a more global orientation of nursing care.

Until 1977 most nurses were in essence THAs (Technical Health Assistants) without a university degree.

Yet, in the last 45 years the majority of the staff has a degree in Nursing (Zabalegui 2002; López-Montesinos & Maciá-Soler, 2015; Monforte-Royo 2019).

The final impulse stems from the 'Bologna Process' which created the European Higher Education Area, modifying the entire university system in the European Union with the accreditation of all Degrees.

Due to this European educational initiative on February 27th, 2008, the Official State Gazette published a brief resolution that had an enormous impact on the regulation of nursing studies (Collins & Hewer 2014).

Therefore, in compliance with the Bologna Process, nursing education in Spain transformed into a program that recognizes bachelor, master and doctoral degrees.

Moreover, since January 2005, the Spanish Government has published specific guidelines for undergraduate, Master's and Doctoral levels, and finally, in October 2007, it established the regulations for an official university education (Cabrera & Zabalegui 2021).

The nursing education program framework in Spain has recently been adapted and modified. Continuous progress in both undergraduate and postgraduate nursing education in Spain ensures that supply and demand for this type of education is well balanced at both public and private universities (Estrada-Masllorens et al., 2016).

Among the new conditions of the Graduate Degree in Nursing, it was emphasized that nursing studies were no longer a three-year Diploma and was eventually converted into a four-year degree with 240 academic credits. Thus, today, 100% of Spanish nurses are university graduates.

With the program of studies resulting from the 'Bologna Process' nursing has reached its maximum development making it possible to obtain a doctorate in nursing which facilitates nursing research and consequently the development of the profession. (Humar & Sansoni 2017).

Regardless of nursing specialties, since 2006, the implementation process has been carried out, although it has been a hard, long and difficult transition. Only those who are already graduated nurses can aim to specialize in one area and they must do it through an examination called RIN (Resident Internal Nurse). The specialties offered nowadays are as follows:

1. Obstetric-Gynecological Nursing (midwife)
2. Mental Health Nursing
3. Occupational Nursing
4. Geriatric Nursing
5. Pediatric Nursing

6. Family and Community Nursing

7. Nursing in Medical-Surgical Care (Currently there are no vacancies in this specialty)

Once a nurse passes the exams, she/he may choose the vacancy they prefer depending on their grades and may start to work in a hospital for two years, studying for the specialty while being employed as a staff nurse.

Conclusions: The underlying principles and goals of the healthcare system in Spain focus on accessibility, longitudinality and continuity.

Moreover, the Spanish healthcare system is trying to ensure universal and free access with equity and fairness. Under this light the evolution of performance measures and other healthcare indicators show the resilience of the health system despite the recent economic crisis.

Nevertheless, some structural reforms are still required to improve chronic care management and the reallocation of resources especially in the community care sector.

The Bologna Process and corresponding Directives of the European Union have had a profound impact on nursing education in Spain who has embraced them in order to restructure and advance its nursing education system.

Thus, the new nursing education structure currently offered in Spain is expected to improve health care as well as nursing reliability and autonomy via specialized nursing tasks and enhanced clinical roles.

Overall, the health status of the Spanish population continues to improve with life expectancy being the highest in the European Union.

However, marked inequalities in self-reported health have also declined recently, although long-standing disability and chronic conditions continue to increase within the country's ageing population.

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