

Doctoral Degree in Nursing Sciences and Public Health

Program Framework and Description

The doctoral degree in Nursing Sciences and Public Health consists of two different curricula, the first one for students with a Master's Degree in Nursing Sciences, and the second one for students with a degree in Medicine who are interested in Public Health. Both curricula convey the same vision of the modern health system, which is devoted to patients and their families, which is widespread in community settings, and which is multidisciplinary and aware of the influence that prevention, organization, and costs have on healthcare assistance. The historical roots of, and the latest scientific advances carried by, this vision may be synthesized in the following ways.

1. The demographic, epidemiological, and health-care transition

Modern demographic and epidemiological transitions ¹ have deeply modified the prevailing healthcare landscape since the end of the 19th century, shifting from a framework once characterized by high mortality and birth-rates to a new equilibrium in which these rates are greatly reduced. This epochal demographic transformation, now extending throughout the world, occurred as a result of an important demographic expansion of people over 60. Increased life expectancy, combined with low birth-rates, has created a new continent made up of an aging population. The elderly in today's Europe comprise a huge proportion of the population even where incomes are medium to low. The consequences of this demographic transition have shown up in all areas of civil, social, and economic lives. Specifically, this phenomenon has induced particular stress on the social security system.

In our view, the existing healthcare system did not sufficiently take into account how this transformation altered the characteristics of the patient population, or how it forced us to parallel subsequent care transitions. For instance, Italy has yet to certify the elderly as a primary population in need of care at all levels, with demands that affect the healthcare system in ways that require radical changes to its organizational structure. A system still "hospital-centric" collect delays, inappropriateness and difficulty of access to all levels of healthcare. The realization of an efficient "continuum of care" between hospital and territory remains lacking. At the same time, major surveys ² (2) indicate that the elderly population is also subject to substantial changes over time, with disability rates declining in the US and Italy. Effective continuum of care should encompass a culture of complex assessment, personalized care plans, rehabilitation, disease prevention, as well as transitional care in a variety of settings. Home care settings, for instance, can make use of new technologies like telemedicine and tele-nursing, which seem to promise adequate monitoring and changes in therapeutic practices that can prompt responsive action when necessary. In this context, it is important to consider the roles of the nurse and the epidemiologist, who are essential to the

¹ KG Manton et al.: Medicare cost effects of recent U.S. disability trends in the elderly: future implications. J Aging Health. 2007 Jun;19(3):359-81.

² KG Manton et al.: Medicare cost effects of recent U.S. disability trends in the elderly: future implications. J Aging Health. 2007 Jun;19(3):359-81.

evaluation process of intervention effectiveness, profile and cost-benefits, and health services management.

2. Social capital

A second, but no less important, societal transformation is the severe reduction of social capital³. The family network, with its links and memberships and social relationships constituting groups of informal caregivers, has been greatly reduced. The advent of a liquid society⁴, well-described in numerous essays by Bowman, partially explains the growth of the single-person-family phenomenon, which in Italy totals almost 8 million people, or 13% of the population⁵. It is not difficult to predict that the growth of loneliness and social isolation will impact the healthcare system in a number of ways, all characterized by the absence of a support person for the sick or frail person who is not fully self-sufficient. This phenomenon increasingly involves the nurse, often the only intermediary between the patient and the healthcare system, who should employ a holistic approach while remaining aware that this human relationship is vital to a patient's physical well-being. The physicality of the nurse's relationship with the patient remains the traditional prerogative of nursing practices, dating back to the inspiration and pioneer of nursing science⁶, Florence Nightingale, who is the first attributed with the title of Nurse in its current meaning.

Five themes were identified...to represent a health relationship: take care; be careful; nourish; be competent; [and] be genuine. [Putting] ...healthcare at the centre of policies on the security of the patient and the medical staff has been a principle key to Nightingale thought [and central to] many studies of modern nursing....Nursing constantly evolve[s] [toward] the combination of heterogeneous and multidisciplinary...knowledge where...care is the subject. In its development[al] process,...nursing [is] considered [an] important... value, [comparable to] the ancient disciplines that...have defined strategies, reasons, and ontological aspects of scientific research and professional practice [and] are the foundation[s] of what to do. [But we must] also [include the] humanities, [which represent]... indispensable fundamentals of how and why to do. In nursing, [caring for] the sick person has been a part of our professional language since the Victorian era. For this reason, [in order] to define...nursing science, it is necessary to [define] the word "care".

The above quote references the philosophy of Human Caring and, in particular, the beliefs of Leininger and Watson. This is the ontology of relationship held within the nursing profession, which interprets the life of each person as an event intimately

³ RD Putnam: Bowling Alone: The Collapse and Revival of American Community. Journal of Democracy 6 (1): 65-78. doi:10.1353/jod.1995.0002.

⁴ K. Bowman: La solitudine del cittadino globale, Ed. Feltrinelli - 2000 ISBN 978-88-07-72053-6

⁵ ISTAT

⁶ Wagner DJ et al. An exploration of the nature of caring relationships in the writings of Florence Nightingale. J Holist Nurs. 2010 Dec;28(4):225-34. doi: 10.1177/0898010110386609.

connected to the lives of others. For Leininger, the Science of Caring is the foundation of nursing science, describing care as a complex activity that is essential to life because without it life itself cannot be. But care is not only needed for the preservation of life, it also serves to give completeness and realization of our existential possibilities.

In this sense, care in nursing becomes protection, preservation, and development of the person, with the aim to promote care's healing potential, creating itself within the specific characteristics of the person involved. It is with this concept that the element of the art of Nursing is realized and understood as a set of various possible expressions that emerge from contact with one another. The rediscovery of these foundations and their reintroduction to a world of individuals opens a space for research and infinite themes: from self-care to health education; from disease and harm prevention in daily living to knowledge of good nutrition⁷. These examples are not accidental; we mention them here because we are convinced that they are often subject areas that are not passed on to the general population or applied in the culture.

3. Health in the contemporary world

During the twentieth century, the concept of health changed dramatically as a result of the transformations previously mentioned. Health as "the absence of disease" is well-conformed to a world made up primarily of young people and children, as in 1800s Europe, which was dominated by infectious diseases and "all or nothing" resolutions. The disease was perceived as a foreign agent that invaded a healthy body. After World War II, and typical of an era when chronic degenerative diseases and scientific utopianism were developing, health was defined as complete psychic, physical, and mental wellbeing combined with the certainty that science would defeat every known disease. However, with the aging of the population, healthcare underwent conceptual changes that caught up to Canguilhem's definition, reported in an editorial in the *Lancet*⁸: *Canguilhem rejected the idea that there were normal or abnormal states of health. He saw health not as something defined statistically or mechanistically. Rather, he saw health as the ability to adapt to one's environment. Health is not a fixed entity. It varies for every individual, depending on their circumstances. Health is defined not by the doctor, but by the person, according to his or her functional needs. The role of the doctor is to help the individual adapt to their unique prevailing conditions. This should be the meaning of "personalized medicine."*

The author proposes to free the concept of health from a medical and scientific setting, which is likely to be reduced to statistical or mechanistic parameters, with the fixed and impersonal entity of the "physician". There would be no more references to a final judgment, but instead treatment would be directed toward helping patients adjust to their own needs and conditions. The new framework would be complete with the growing emergence of frailty as a diagnosed condition

⁷ MC Marazzi et al.: *Nutrizione e salute. Le basi conoscitive per una corretta educazione alimentare*. Ed. Piccin, 2014

⁸ www.thelancet.com, Vol 373 March 7, 2009

that accompanies aging, and which is recognized as an inability to adapt and often accompanied by a sudden deterioration of health. In this context, nurses and doctors have been called to answer epidemiological and organizational challenges that ask us to commit to research and design a health service offering continuity of care, mobility, and a caregiver system with integrative and evaluative skills yet to be fully realized.

4. Nursing: preserve the traditions, expand innovation

From Nightingale to present day, there has been a radical change in the epidemiological and demographic framework. Infectious diseases have been eradicated in part, and nurses have continued to work within health systems to improve their contribution to and increase their skills in line with changing health needs and scenarios. Empirical research conducted by nurses has grown, both quantitatively and qualitatively, particularly in the areas of clinical management. Management of patient responses to health problems, with the consciousness that the human being is also an *immune carrier*, is of singular importance to the biological, mental, emotional, and intellectual patient education within the diverse organizations of health services.

The majority of significant studies for nursing from the National Institute of Nursing Research (NINR) relate to the education of the patient, the family, and the community. A new stance on health has appeared, which is not necessarily and immediately about the disease, but about the fragility of a state of being that concerns tens of millions of people and contains in itself great potential preventative value. Parallel with the classic International Classification of Diseases (ICD), new proposals are being advanced for new health encoding based on function, social manifestation, and the concept of independence and autonomy. Furthermore, we believe that fragility must be included in elective doctoral studies because of its enormous implications on care planning.

5. Public health, environmental challenges, and inequality and rights in the global world

A massive migration, linked to economic and environmental conflicts over vast areas of the planet, has now entered our own era. The presence of immigrants in the West is destined to further growth, with significant demographic, epidemiological, and clinical consequences. A large part of the youth population, for example, consists of the children of immigrants. And expanding areas of research are now concerned with the expanding cohorts of new immigrants with limited access to healthcare systems, as well as with the re-introduction of old diseases, or the production of new diseases, in second and third generation migrants. It is precisely for this reason that the last two studies counted in the NINR classification concern the organizational arena of healthcare, with an eye to reinventing operational solutions that can give the patient a central role in the care process. Such a shift will work to ensure the appropriateness of nursing care, to urge the general improvement in the quality of care, as well as in the quality perceived by the patients, and to promote greater satisfaction in the work of nurses. In the time between the diagnosis of disease, treatment, stabilization or *exitus*, the patient moves through many care settings where there is no real synergy, organizational coordination, or effective communication between services

and nursing staff. The discontinuity in the care relationship is experienced by the patient and the family as a widespread sense of abandonment, with repercussions seen in the increased number of health conditions. The preferred care model uses the advanced knowledge and skills of nurses who support and prepare patients and families to more effectively manage post-treatment health changes, which can reduce the number of readmissions and increase the period of time between admissions. To emphasize continuity in the teaching tradition of the Nightingale, new organizational strategies stress creating a good working environment that reduces staff turn-over, thus reducing the risk of burnout and improving patient safety and satisfaction. In fact, there is a direct relationship between the well-being of the nursing staff and the well-being of the patient. Addressing the needs of the nursing staff is a matter that must receive high priority attention in healthcare policies because sick lives depend on it.

As with NINR, doctoral research lines are oriented toward those issues that affect daily patient care. Particular attention must be paid to those who, by culture, age, gender, or physical disability, constitute the most vulnerable of the population and whose right to health is at greatest risk because of exclusion from access to healthcare. The commitment of the PhD is to systematize its own body of knowledge aimed at the care of individual and collective health, as well as to scrutinize the appropriateness, effectiveness, and efficiency of new content that continuously enriches welfare activities. The methodological approach of the doctorate is also gradually opening itself to qualitative research approaches, whose landings, as we know, are often considered less evidence-based than its quantitative research, but assumes a form of knowledge better able to pay attention to the experiences lived, the meanings, the reflectivity of the subjects, and their ways of perceiving reality.

There are many studies that use qualitative approaches, supported by methodological rigor, which acknowledge the experiences of health and illness, as they are lived, by the patients who are assisted. For the two types of research, the qualitative and the quantitative, nursing arises in a dialog position that exceeds the question of opposition or subordination between the two approaches. Instead, the approach is a matter of choice between methods that conform to the specifications applicable for study and research, with a thought that does not separate, but aggregates and brings together the different positions. In this way, we come to the consideration of mixed methods as a possibility for dialogue and exchange between different perspectives and methods of study. We could add a third megatrend involved in this reflection: the relationship between health and the environment and the commitment associated with it. A key message of the European Environmental Agency in 2015 ⁹ is the following: *Around 25% of the burden of disease and deaths is attributable to environmental causes. Urban air pollution is to become the main environmental cause of premature mortality worldwide in 2050.*

We should mention other aspects related to environmental issues of deep interest to public health, including the security and availability of water resources, the

⁹ SOER 2015 – The European environment – state and outlook 2015

consequences of a changing climate and their effects on human nutrition, and much more. It is important to emphasize that, in a world increasingly populated by older people, plagued by many non-communicable diseases of a chronic-degenerative nature, and characterized by a poor relationship with the environment, the experts of public health must broaden their vision of and interest in the impact these issues have on the overall health of human populations.

Today, we need to think in terms of sustainability, human rights, and the fight against inequalities, remembering that in a world increasingly connected to the fate of individuals, people are increasingly dependent upon each other. And in a world that has become a common house, in which air, water, and resources - to name just a few - are increasingly shared, much work is required to effectively control the determinants of health, that is: food, education, income, physical activity, safe water, reduced pollution, and stronger networks of social relationships. In short, we are interested in expanding education and the right to education around the world, not only in our territory; we are interested in the control of emissions from industrial activities, which must be properly regulated world-wide. For obvious reasons, the rights of each are the same rights for all.

The discussion also should not overlook the problem of lifestyles, their impact, and possible control measures. In this regard, we cite an interesting document of the European Union¹⁰: *A significant amount of premature mortality is the result of lifestyle practices such as smoking, poor diet and lack of physical activity. According to the WHO, deaths from chronic diseases, which are significantly associated with lifestyle risk factors, accounted for 60% of all deaths worldwide: 20% in high income countries and 80% in low and middle income countries in 2005 (WHO 2005). To take another example, in the United States (US), deaths from smoking, inactive lifestyle, poor diet and misuse of alcohol have been estimated to be responsible for 900,000 deaths annually, nearly 40% of the total yearly mortality¹¹.*

In brief, the PhD program in Nursing Sciences and Public Health is dedicated to those who want to devote their efforts to the innovative and ambitious research aimed at transforming and adapting health services to the needs of our time, while always keeping our gaze on the planet's horizon. However, in this work, it will be necessary to remain faithful to the historic roots of the different disciplines, revisiting them in a modern key, without losing the old talent.

¹⁰ Is prevention better than cure? A review of the evidence By Divya Srivastava, European Commission Directorate-General "Employment, Social Affairs and Equal Opportunities" Unit E1 - Social and Demographic Analysis . Manuscript completed in May 2008

¹¹ Mokdad, Marks et al. 2005