

Quantitative Research in Nursing Science

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Nowadays, writing about research is a challenge both for the recurrence of the topic in the scientific literature, as for the certainty of the idea that “you just learn to research, researching”. In this sense, this editorial aims to reflect a little on the usefulness of quantitative research for Nursing and also on the possibility that this is another option in the scientific development of a profession that has been gaining space in the scientific world with great effort through its historical and cultural evolution.

It is known that, in actuality, the scientific trends are discussed in two scientific paradigms, the quantitative and the qualitative, that in many areas of knowledge are integrated and whose tendency to achieve evidences increasingly closer to the reality of human beings goes through integrating them in order to reach the so-called joint mixed research, that whoever writes about is defender, as Hernández Sampieri¹ would say, “scientific research is dynamic, variable and progressive”.

In the case of nursing, the research trend moves from a perspective centered on the interaction between people and their environment, on education in nursing and the nurses, as well as the experiences of nurses in the care of patients with certain health problems, that focus on the creation and confirmation of theories and models to the most current, to find evidence that could be used in practice, which resulted in evidence-based practice.^{2,3}

In this scientific struggle, the main studies have been focused mainly on the quantitative research, in correspondence, of course, with the positivist paradigm that has dominated science for a long time. However, in recent times, qualitative studies have increased, and perhaps, even if to a lesser extent, also mixed studies.

Quantitative research is one in which quantitative data on variables are collected and analyzed. In this way, this type of research is able to identify the deep nature of realities, its system of relations, its dynamic structure. It can also determine the strength of association or correlation between variables, the generalization and objectification of the results through a sample that makes inference to a population. In addition to the study of association or correlation, quantitative research may also, at its time, make causal inferences which explains why things happen or not in a particular way.⁴

In this type of project, it is interesting to include the practical studies based on evidences, which helps to prove the efficiency and effectiveness of secure Nursing interventions.

Another area in which these types of studies are needed are the epidemiological investigations, in which Nursing participates, but can still explore much more, both in diversity of epidemiology projects, allowing the identification of the most vulnerable groups of the population, risk factors, etc., as well as the possibility to assess the effects of an intervention, as is the case of Nursing interventions. And there is also a less explored field of research for Nursing, where the initial trend are the quantitative studies and, in recent times, mixed studies have increased. We are talking about Research in Health Systems and Policies (“IPSS”), known until the year 2000 as Research in Health Systems and Services (“ISSS”).

This is defined as an investigative field that seeks to understand and improve the way societies organize themselves to achieve their health goals, and how different actors interact in the process of defining and implementing policies to achieve good results. It is by nature interdisciplinary, a mixture of economics, sociology, anthropology, political sciences, public health and epidemiology that, in total, forms a comprehensive view of how health systems respond and adapt to changes introduced with health policies, And how these policies can influence - and be recorded by - health systems and determinants of health.⁵

These studies address areas of knowledge such as the organization of systems and services, human and financial resource management, community participation, accessibility, equity, effectiveness and efficiency, and the effect of health policy implementation. All these areas are, therefore, in line with the need for Nursing studies that prioritize the attention not only in the care itself, but also in the contributions of care to the health of the populations.

For many of these studies, it is necessary to use the tools of quantitative research, such as the evaluation of the quality of care, the satisfaction of services, health programs, among others. This is the importance of knowing this area of research, complementing it with qualitative research and achieving mixed studies focused on caring for humans and their environment.

Recognizing the dynamic nature of science leads us to value the need to continue to use, whenever necessary, quantitative research, as it is the case of Nursing, to carry out its development

as a science. Especially if we take into account that one of the purposes of the quantitative approach is to establish patterns of behavior and to prove theories.

REFERENCES

1. Hernández-Sampieri R, Fernández-Collado C, Baptista P. Metodología de la Investigación. 4th ed. México DF: McGraw-Hill Interamericana; 2006, p. 4.
2. Fawcett J. Tendencias de investigación en enfermería. Aquichan [internet] 2014;14(3):289-293. [cited 2017 Jan] Available from <<http://www.redalyc.org/articulo.oa?id=74132361001>> ISSN 1657-5997
3. Knudson EM. Tendencias de la investigación en enfermería. Repertorio de Medicina y Cirugía, 2009, vol. 18, no 2, p. 90.
4. Pita Fernández S, Pértegas Díaz S. Investigación cuantitativa y cualitativa. Cad Aten Primaria, 2002, vol. 9, p. 76-8. Disponible en: http://fisterra.com/mbe/investiga/cuanti_cuali/cuanti_cuali2.pdf
5. Alliance for Health Policy and Systems Research. What is HPSR? Overview [internet] Geneva: World Health Organization; 2011 [cited 2017 Jan 14]. Available from: <http://www.who.int/alliance-hpsr/about/hpsr/en/>