

Women, science and research

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On being invited to write this editorial, I chose two perspectives from the multiple possibilities of looking at the theme Women, science, and research: the perspective of the historical presence of women as producers of knowledge in the scientific field and as a constituent element of the impact of feminism (as an epistemological field) in the turnaround caused in science during these times of a transition paradigm.

A look at women as producers of knowledge leads to discoveries, which are not so old, as to how women have contributed since the beginning of civilization. For example, it is worth citing the priestess Em Hedu'Anna who, four thousand years ago in Babylon, devoted herself to deciphering the stars and developing calendars, which became a reference for astronomers and mathematicians. In Alexandria, Maria la Hebraea, a chemist during the first century, made an enormous contribution to biological science by inventing the boiling water bath. Grecian Hypatia, during the third century, became the Director of the Academy of Alexandria at only 30 years of age and helped discover the elliptical orbits of planets; in addition, she devoted herself to the study of mathematics, philosophy, religion, poetry, arts, oratory, and rhetoric. The Egyptian priestess Isis gave writing and medicine to the people of the Nile, invented the process of embalming, and taught agriculture, navigation, and astronomy to her countrymen. During the 11th century, the physician Trotula of Ruggiero, in Salerno, wrote one of the first treatises on gynecology, in favor of the well-being of women. At the beginning of the 20th century, Marie Curie devoted herself to mathematics, astronomy, and philosophy, decisively influencing the philosophical thought that had persisted since the 18th(¹) century.

The list could be much longer if we include the wives of famous scientists who have always been in the shadow of their husbands or companions, when they are the ones who would otherwise have the authorship of works signed by their husbands⁽²⁾. A relevant case is that of Madame Du Chatelet, one of those invisible women, whose quote exposes the cruelty of the relationship between knowledge and women, a reflection of her time:

The love of study is first among all the passions that most contributes to our happiness. The love of the study encloses a passion of which a noble soul is never exempt – the passion for glory; for half of humanity, there is no other way than this to acquire it, and rightly so, it is this half that education removes the necessary means (for this purpose), depriving them of the taste (...) women are excluded, by their condition, of any kind of glory, and when, by chance, one is born with a sufficiently elevated soul, there is nothing left but study to console her for all of the dependencies of which she is condemned⁽³⁾.

Despite the great advances made because of the entrance of women in the scientific field during the 19th, 20th, and 21st centuries, serious problems still persist. According to Raquel Soares, of Porto University:

We are all aware of the under-representation of women in science, predominantly when we refer to positions of leadership. A telling example is the fact that only ten percent of the scientists considered for the Nobel Prize, since its inception in 1901, are female. However, it becomes a paradox, when we realize that the educational level of women is on the increase as compared with that of the men worldwide. A growing number of female students enter universities in areas as diverse as the humanities, medicine, or even engineering (...). But how do you explain this paradox? The main cause is the pressure that society puts on a woman. (...) the woman continues to have the responsibility of managing the family tasks. Therefore, it is difficult (and sometimes almost incompatible) to reconcile professional activity in an area as absorbing as science with the family life and social dynamics of today's world. On the other hand, since science is so fascinating, we could easily become engaged in the work for days at a stretch, making the other day-to-day activities secondary⁽⁴⁾.

Besides the saga of domestic work, several other obstacles for the prominent presence of women in the world of science could still be added, such as the prejudice existing in some areas of knowledge where women, supposedly possessing characteristics of fragility, sensitivity, and even lack of physical strength, would be prevented from acting; however, in other areas, these same characteristics would be precisely required for protagonists, as in the case of nursing.

If all of this can be seen in the history of women, what do you say, then, in relation to the second perspective, referring to the type of knowledge produced by them from the second half of the 20th century, i.e., of the relationship between knowledge and the feminist epistemology?

Eleonora Menicucci de Oliveira, current Minister of the Special Secretariat of Policies for Women, activist and historical academic, already noted in 2008 that:

In the relationship between feminism and the construction of knowledge (...) the feminists researchers brought the dimension of daily life to the Humanities, that is, the different experiences of women, with their life stories marked by places in the work world(s) and by sexual and reproductive life⁽⁵⁾.

This was done by denaturing of social relations regarded as asexual, taken now as determinants of the problems of life of men and women, and proposing a new vision of the world before the truths established by orthodox science and morals.

Florence Thomas, of the National University of Colombia, considers herself feminist because she defends an epistemology that accepts complexity, ambiguities, uncertainties, and suspicion. For her, today there is no single truth, history with uppercase H, nor universal subject. There are truths, reports, and contingencies. Next to the official history,

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traditionally written by men, there are unofficial stories, stories of life that teach us a great deal about another face of the world, perhaps its more humane face⁽⁶⁾.

You could say that, in almost all areas of knowledge, the consequences of this way of seeing the world have been undeniable. Many problems of women's lives (and why not, of men?), have been revised and reinterpreted by feminist science to bring out the dimension of the social subject – woman or man – and turn it from a mere data supplier into an active protagonist of the knowledge construction process.

The methodological feminist option, which puts emphasis on the daily life and subjectivity, is anchored in the theoretical approaches that reinforce the need for critical hermeneutic reflection as an analytical strategy to transform the science of a foreign object, far from our lives, into something familiar and close, with the ability to communicate their failures and limits. Thus, feminist studies (...) have shown that knowledge is fallible and the truth is always provisional and approximate, causing one of the most important crises in the context of the knowledge that the multiple real intelligences are driven by external social practices⁽⁷⁾.

For the purpose of justification, it is worth remembering that academic feminism was born on the streets, in rebellions against the subordination of women and the inequalities of rights in relation to men, for example, the suffragette movement.

What does this have to do with us, nurses and producers of knowledge in nursing? In our history, we can rely on remarkable examples in two strands. Florence Nightingale herself, in her writings, despite advocating the cultural standards and morality compatible with the sternness of the Victorian era towards women, protested at the same time against the inevitable fate of the stronghold of the home, to propose the professionalization of young people of privileged classes as an alternative to marriage and to oppose the knowledge that was preferentially transferred to females, such as in the arts and good manners, accompanied by a nurturing of delicacy and romantic love that all the young girls of respectable families should know to please and serve their future husbands.

By proposing significant changes even in fashion, freeing the nurses' uniform of uncomfortable corsets, wouldn't our founder be creating a feminist revolution in nature? As for the recognition of her deeds, in England, even today she occupies a privileged place in the history of health sciences, alongside contemporaries such as John Snow, considered the father of Epidemiology, as well as other statisticians and strategists.

This example neither indicates that the visibility of nurses in the history of knowledge is guaranteed nor that it has been easily achieved. Even today, most of us occupy subordinate places and are invisible in the field of science, maybe even more than women from other areas, because, in addition to women, we advocate for an equally underprivileged and undervalued field-nursing care.

The dialogue of nursing with feminism has been difficult, both in activism as well as in the academy. At first, what often intimidates us is the stark hardness of a certain frankly nihilist feminism established for women – including that which touches on the historically feminine characteristics so divulged and valued in our profession. At the academy, although the genus studies in health in recent times have grown more in nursing than in other areas, such as medicine, our practices reflect little or nothing to overcome the epistemology and revolution of feminism.

Even in research practice, in general, our research lacks a methodological-theoretical depth that is important to be on par with genus researchers from other areas of knowledge. What is to be said, then, of the power of our studies to trigger transformations in improving the quality of life of women, from their role as political subjects and of rights, from the investigative process to the consumption of the product generated by the investigation?

In this area, as in many others, the path that lies ahead is arduous. It involves facing the battle of daily life as women and nurses, aware of the responsibility of a science that will put the values of human life at the forefront, as much in the process as well as in the product, and us women as subjects of that life. In short, to paraphrase Boaventura Santos, it is not simply a new knowledge we need [to produce]; what we need is [to be producers of] a new mode of knowledge production⁽⁷⁾ (my additions).

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