

## Gendering content in Medicine: the experience of TRIGGER project in the University of Pisa

Rita Biancheri, Silvia Cervia

Department of Political Science, University of Pisa, Pisa, Italy

### Context

The University of Pisa is one of the partners of the TRIGGER Project (*TRansforming Institutions by Gendering contents and Gaining Equality in Research*). The project is co-funded by the 7th Framework Programme. It is coordinated and co-funded by the Italian Government, and is supported by an institute specialising in gender and science (ASDO, *Assemblea delle Donne per lo Sviluppo e la Lotta all'Esclusione Sociale*). Five universities from five EU member states co-finance the project (Czech Republic, France, UK, Spain and Italy).

In keeping with the spirit of the project, each partner has to bring about significant changes in its own institution by means of a specific Action Plan.

When designing a gender action plan for the University of Pisa, we considered both the results of previous European projects and the university's structural and contingent characteristics as a research institute.

Firstly, we defined the concept of gender mainstreaming by integrating the numerous meanings attached to the topic of "gender in research": research carried out by women, research for women, research about women (CEC-WYS, 2007). At the same time, we considered the changes that may occur; but for this to happen, programmes need to last long enough to take hold, to simultaneously manage a multiplicity of factors and levels, to be able to manage conflicts and to strongly involve leaders, as well as the women in the organizations, be they scientists, technicians or administrative personnel (PRAGES Project, 2009).

Secondly, Italian universities have to cope with legislative changes that could have a negative impact on the actions leading to gender-equal and gender-aware science. In 2013, the Equal Opportunities Committee at University level was replaced by a body with non-specific duties in the field of gender equality. This amendment to the law threatens the existence of institutional initiatives, as well as the possibility of creating new ones. Moreover, many issues remain unresolved, such as the low number of women in top scientific and managerial positions, or bridging the gender gap between the faculties of science and social and human sciences, with the added difficulty of involving the departments of natural sciences and engineering.

As for structural characteristics, Pisa University is one of the oldest and largest Italian universities, with 52,000

students and 1,552 professors in 20 Departments. The percentage of women in each phase of their careers is in line with national averages (52% female undergraduates, 51% graduates, 42.8% researchers, 33% associate professors, and 15% full professors).

Despite the differences among Departments, the gradient of exclusion is more pronounced in the scientific field.

Because of this, in addition to the numerous actions at university level and those intended to multiply external effects, the TRIGGER actions in Pisa focus on six Science and Technology Departments in the Medical and Engineering Faculties. These two scientific fields hold two negative records, i.e. the highest rate of expulsion of women in each phase of their scientific careers (Medicine), and the lowest number of women, which remains constant at all levels of their scientific careers (Engineering) (Figure 1).

### Pisa University's action plan for gendering content

To ensure the presence of women at all levels, at the University of Pisa we are promoting an integrated set of actions focused on both permanent innovative institutional arrangements, for the purpose of implementing structural changes that are conducive to gender equality and equal opportunities, and on content-oriented initiatives, aimed at proving the usefulness of gender priorities, points of view and peculiarities within the research and innovation processes. We believe that gender equality in science cannot be achieved if core scientific and research practices do not adopt a gender approach. We see a large number of women in science as an important factor for this process.

This is the reason why we are especially focusing on actions aimed at making gender-sensitivity a feature of the design, processes and use of research in the target Departments.

A key aspect of the TRIGGER project deals with the introduction of a gender-based perspective in the healthcare sector, a topic which over the past few years has achieved global reach. Many conferences, even in Italy, have focused on the subject, but it has yet to be dealt with systematically in the education and training programs of doctors and healthcare professionals. Indeed,

it is a field of study that is broached marginally, by those few professors who feel it is important that science no longer be perceived as neutral and that any and all differences be recognised.

There is no doubt that in such consolidated terrain the use of gender as a paradigm has met with major obstacles in all disciplinary fields, particularly where academic influence has crystallised studies on subjects deemed relevant by the scientific community, and (mistakenly) excluded any studies of female relevance. Bridging this gap is considered by the European Union an essential element for innovation in research; it is for this reason that the actions of TRIGGER target the projects of male and female students involving gender by providing financial awards and scholarships.

As is well known, there has been a consistent increase in the number of female students and the number of registered female doctors. As in the case of other disciplines, this increased female presence impugns the current dominating culture, thereby permitting the introduction of new points of view.

Indeed, today, the areas of care and prevention require a more comprehensive dimension as opposed to the clinical and functional criteria of medical science. Apposing health and gender requires a multidisciplinary approach if we are to implement a critical view of individual statuses, overcome certain barriers and be able to interact with contributions from other sectors.

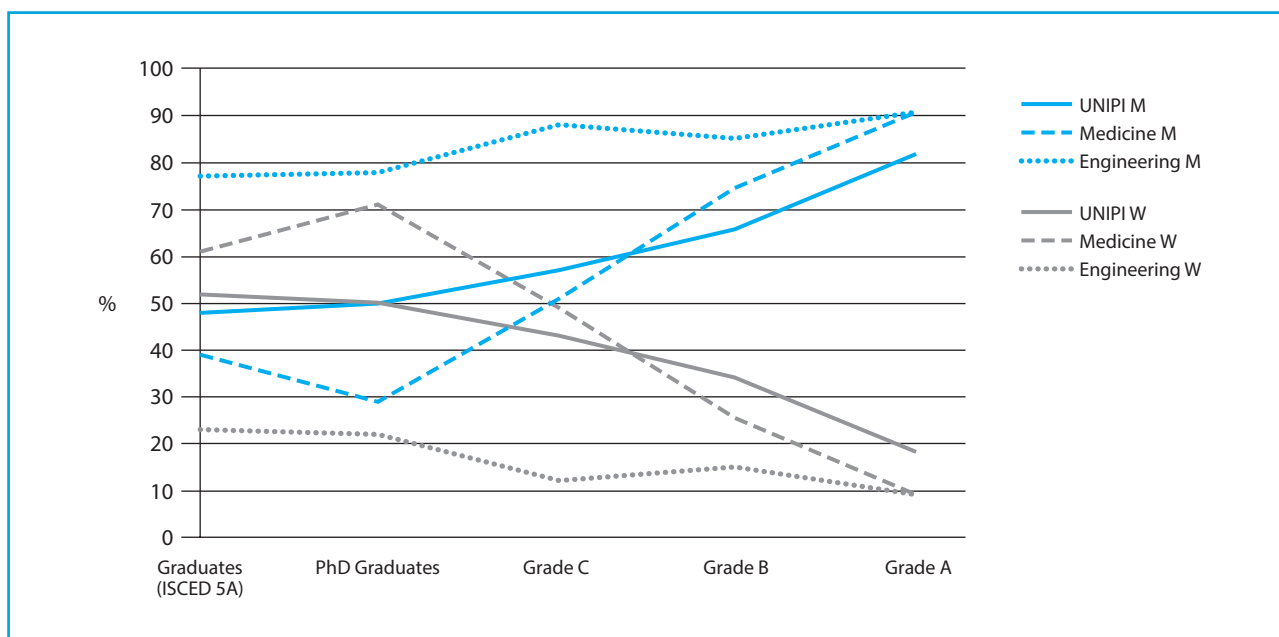
With this objective in mind, research groups have been set up whose work has impacted their know-how, thereby favouring a more holistic vision of health. Work

has been done on a series of levels, building bridges, crossing language barriers and influencing perspectives in favour of changed forms of knowledge, given the complexity of the examined objects of study and the issues that remain unsolved.

The answers can only come from a dialectical confrontation, a practice that is still underused. The TRIGGER Project of the University of Pisa is committed to preparing a toolbox that makes the permeability of knowledge in the health sector feasible. Our aim is to ensure that the heuristic value of the gender paradigm in medicine is recognised, thereby activating the necessary cognitive turning point.

Currently, there is a considerable amount of confusion surrounding gender-based medicine and above all, the term 'gender', which is frequently used as a synonym for 'sex'. As a result, the aim of this four-year project (2014-2017) is to consolidate reflection in the three target Departments of Medicine, without expecting to be exhaustive, but rather embarking on a path that will clarify many of the problems still present and which have to do with the methods of organisation of chiefly bio-medical knowledge. Our mission entails re-attaching the many ropes that were artificially separated from bridges once built across different disciplines and their languages, reconstructing inter-dependencies, and overcoming dichotomies, first and foremost those between mind and body.

An example of the exemplary collaboration resulting from our Project (Box 1).



**Figure 1.** Proportions of men (M) and women (W) in a typical academic career, students and academic staff. Comparison between Medicine and Engineering and University average. Source: DB UNIPi (Data as at 31 December 2013).

Therefore, it cannot be stressed enough that if we want to tackle the subject of health through the gender-based looking glass and from a multi-disciplinary perspective, then we need to refer to a broader reflection on “situated knowledge” rather than the presumed objectivity of science. We need to refer to that “androcentric eurocentrism”, as defined by Sandra Harding<sup>1</sup>, which constitutes one of the cardinal points of the “paradigm of modernity”.

For those involved in the sociology of health, this critique is certainly an important contribution for the introduction of gender as an applied analytical category in health. Until now, gender has been interpreted as a determining factor influencing conditions, without however defining its heuristic potential, or it has been used to define the physical differences associated with the reproductive system.

The delay in launching theoretical studies and empirical research related to gender, especially in Italy, can be explained by understanding the obstacles and the cultural construct of our knowledge, the framework in which thoughts influencing life contexts and determining the dynamics of power are developed. On this basis, Harding has exposed the unlikelihood of “having a view from nowhere” in areas where relationships are based on inequality.

There is therefore an interpretation of science as a historical, social, cultural contingent, a “human dimension” derived from a multitude of relevant criteria and meanings stemming from the peculiarities of the subject.

Women’s studies have succeeded in contributing to refuting what Evelyn Keller<sup>2</sup> referred to as rationality without the body, entrusted to the mind’s eye, whilst there is a well-structured male technical-scientific view upon which primary theoretical and methodological frameworks have been built and consolidated.

Acquiring such knowledge, raising questions and being open to differing points of view can open our eyes to new horizons, and foster change for more suitable prevention, more effective diagnosis and better treatment.

## References

1. Harding S. The science question in feminism. New York: Cornell University 1986.
2. Keller EF. Gender and science: Origin, history, and politics. In: Constructing knowledge in the history of Science, Chicago: University of Chicago Press 1995: 26-38.

### Box 1. Relationship between psychosocial factors and cardiovascular disease: arterial hypertension as a model of multidisciplinary approach to gender differences

Ischemic heart disease represents a major cause of mortality both in men and in women. Gender differences in the epidemiology, pathophysiology, clinical manifestations and outcomes of cardiovascular disease are well established but there is still a lack of awareness of this both in the general population and among healthcare providers. Although traditional cardiovascular risk factors have a similar prevalence in men and women, women suffering from suspected or established ischemic heart disease show a minor extent of coronary atherosclerotic lesion regardless of a more advanced age, suggesting that non-traditional factors may play an important role in determining cardiovascular events in women. Psychosocial factors, including depression, work- and marital-related stress, low socio-economic status, have been also linked with an increased prevalence and incidence of hypertension. For most of these factors, the association seems to be tighter in women than in men, but more studies are required to demonstrate these findings, with potentially relevant clinical consequences. Sleep disorders and dysfunctional coping strategies might be involved in determining gender differences in the impact of psychosocial factors on cardiovascular outcomes and hypertension. Thus, since psychosocial factors may have different cardiovascular consequences in men and women, further efforts are required to explore pathophysiological mechanisms, to obtain gender-specific data from clinical trials and to translate this knowledge into everyday clinical practice. In order to achieve this aim, a multidisciplinary approach is warranted.

**Stefano Taddei, Rosa Maria Bruno**

Department of Clinical and Experimental Medicine, “Santa Chiara” University Hospital, Pisa