

# Healthcare professionals' confidence with gender medicine: a qualitative study

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Received 16 January 2021; accepted 12 April 2021

**Summary.** The literature states that a gender-oriented approach ensures better performance and equity in medical care and treatment in several areas, such as prevention, diagnosis, therapy and rehabilitation, thus becoming an instrument of clinical governance. Despite this, the dissemination of gender-related medical culture and practices remains severely inadequate. The lack of knowledge of gender medicine principles is particularly evident in all fields of care. This paper reports the results of a descriptive-phenomenological qualitative study aimed at understanding the healthcare professionals' level of confidence with gender medicine. The knowledge, opinions, experiences gained, as well as the projects revolving around gender medicine, were investigated through semi-structured interviews involving 16 healthcare professionals with different profiles who work within the Ausl of Bologna.

**Keywords.** Gender medicine, qualitative study, healthcare professionals' opinion, healthcare professionals' experience.

## *La confidenza dei professionisti sanitari con il tema della medicina di genere: uno studio qualitativo*

**Riassunto.** Negli ultimi anni la letteratura segnala come un approccio genere-orientato garantisce la miglior appropriatezza ed equità nelle cure e nei trattamenti sanitari in ambito di prevenzione, diagnosi, terapia e riabilitazione, costituendo di fatto uno strumento di *clinical governance*. Nonostante ciò, la diffusione della cultura e delle pratiche correlate alla medicina di genere permane fortemente carente. La scarsa conoscenza dei principi della medicina di genere si riscontra negli ambiti delle comunità di pratica. Il presente lavoro riporta i risultati di uno studio qualitativo ad indirizzo fenomenologico descrittivo, volto a comprendere il livello di confidenza che i professionisti sanitari hanno nei confronti della medicina di genere. Le conoscenze, le opinioni, le esperienze maturate e i progetti che ruotano attorno alla medicina di genere sono stati indagati mediante interviste semistrutturate, coinvolgendo 16 professionisti con differenti profili professionali che esercitano nei servizi dell'Ausl di Bologna.

**Parole chiave.** Medicina di genere, studio qualitativo, opinioni dei professionisti sanitari, esperienza dei professionisti sanitari.

## Introduction

Gender medicine addresses the biological differences between the male and female sexes and the gender differences affecting the medical status, thus representing a critical point of interest for the national health service.<sup>1</sup> Epidemiology shows that all conditions have a different incidence and prevalence depending on sex, as in the case of cardiovascular, autoimmune, oncological and psychiatric diseases, where symptoms, outcomes and mortality differ depending on gender.<sup>2-5</sup> It should be noted that the female population is represented to a lesser extent in epidemiological studies, drug trials, clinical trials, laboratory tests and diagnostic imaging, which causes inappropriate healthcare approaches.<sup>1,2,6</sup>

In order to better understand the phenomenon of gender medicine, it is necessary to achieve a clearness of terminology, since sex and gender are often wrongly used as synonyms, when in fact their meaning is profoundly different: while the term 'sex' indicates the biological sphere of being male or female, according to the reproductive organs and functions assigned by the chromosome set, 'gender' is related to socially built roles, behaviors, activities and attributes that our contemporary society considers appropriate for men and women. These differences – which are related to the social-cultural ambit of subjects and populations – have significant effects in terms of access to care, risk factors for several diseases, adherence to treatment and illness experience.<sup>1-4,6-8</sup> In order to implement an individualized medicine, it is necessary to equally consider the genetic and cultural aspects;<sup>1,3</sup> this leads towards a paradigm shift, which perceives the person – and no longer the disease – at the heart of the health care processes.<sup>9</sup>

Therefore, gender medicine is configured as an approach to health inequalities, from the onset and evolution of the disease to its treatment.<sup>10</sup> An approach guided by gender ensures the best appropriateness and equity in medical care and treatment in the areas of prevention, diagnosis, therapy and rehabilitation, thus becoming an instrument of clinical governance.<sup>11-14</sup>

According to the WHO's appeal to integrate gender in health policies as a health determinant,<sup>9,13-15</sup> the Emilia-Romagna's 2017-2019 social and health plan

aims to create operational guidelines for a multidisciplinary approach addressed to all the healthcare organization at regional level and to promote and spread a uniform gender-specific training to all healthcare and social providers.

Along this line, the Local health authority (Ausl) of Bologna has promoted a qualitative study to understand the perception, the experience and the knowledge of professionals on the issue of gender medicine. In fact, in literature there is little interest in healthcare providers, and their knowledge and experiences on gender medicine. The main aim of this research is to understand the healthcare providers' perspective on gender-specific medicine, as well as being the starting point to investigate the base knowledge and the training needs of professionals, in order to design targeted training events and implementation strategies.<sup>9</sup>

## Materials and methods

### Study design

A qualitative descriptive phenomenological study was carried out. Data were collected through semi-structured interviews. The interview schedule (Appendix 1) contained a number of key questions in relation to the confidence with and experience in gender medicine.

### Participants

The study cohort consisted of 16 healthcare professionals (HCPs) working in different departments of the Ausl of Bologna (Table 1). The professionals were selected based on purposive sampling, deliberate choices from their profiles, and gender. Four professionals could not participate in the study because they were too busy at the time of the interview.

Qualitative data was collected in one-on-one, semi-structured interviews, conducted in a private room near the interviewee's workplace. Each interview took an average of 30 minutes.

### Data analysis

Interviews were recorded and integrally transcribed. The *in vivo coding* method<sup>16</sup> was adopted to analyze data, with the identification of significant units of text, called "meaning units", and, for each of them, the creation of labels that were grouped into categories. To ensure the reliability and accuracy of data, the two researchers first performed the analysis in an independent manner, then a consensual validation was carried out. No software was used for data analysis.

## Appendix 1. Semi-structured interview

### Introduction

- First of all, please tell me something about you...
- What's your job profile?
- Where do you work?
- How long have you been working as (job profile)...?
- How long have you been working in your service?

### Gender medicine training and knowledge

- Do you know gender medicine?
- Have you ever heard about gender medicine?
- Have you ever studied gender medicine during your medical studies? (if yes, in which subject?)
- Have you ever attended conferences/workshops about gender medicine?
- Do you usually read articles about gender medicine?
- What is your idea of gender medicine?
- Could you give me three words related to gender medicine?
- According to you, what are the benefits of gender medicine in public health?

### Gender medicine and job experience

- Have you ever taken part into any gender medicine project or research?
- Have there ever been or are there any projects on gender medicine in your work environment?
- Do you have any stories to tell me about gender medicine that you have experienced during your working practice?
- What do you think about being a woman or a man in your profession?
- Do you think there are still gender differences in the healthcare professions? If yes, could you give me some examples?
- What are the advantages of gender medicine in your field?

### Gender medicine and future prospects

- In your opinion, how could gender medicine be improved in your field?
- Would you like to tell me something else about gender medicine?

Table 1. The sample

Respondents	N (%)	16 (100)
Male	N (%)	5 (31.2)
Female	N (%)	11 (68.8)
Age	Average (DS) Median (Range)	45,4 (9.9) 45.5 (27-62)
Profession/Role		
	Administrative	1
	Nurse coordinator	2
	Dietician	1
	Medical manager	3
	Cardiologist	1
	Nutritionist	1
	Psychiatrist	1
	Pharmacist	1
	Physiotherapist	1
	Nurse	2
	General practitioner	1
	Social health worker	1
	Midwife	1
	Psychologist	2
Years of service at the Ausl of Bologna	Average (DS) Median (Range)	14.63 (11.6) 13.5 (0-41)

### *Ethical considerations*

Voluntary participation in the interviews occurred through invitation. All participants signed their written consent to record the discussion. The research took place according to Helsinki guidelines, and was promoted by the clinical governance of the Ausl of Bologna.

## Results

### *The healthcare professionals' confidence with gender medicine*

The first topic investigated relates to the confidence level of professionals with gender medicine. Only a small group of interviewees stated that they had never heard of it, while the majority made reference to concrete situations and events they personally experienced, although transitionally. In this case, respondents mentioned training courses, basic or post-basic, and the reading of scientific articles.

With regard to the definition of gender medicine, the answers were attributed to the following categories:

- references to a medicine related to the gender of the patient and the population;
- references to healthcare relationships based on the gender of the practitioner and/or the responder;
- other definitions unrelated to "medicine and gender", as in the case of intercultural situations or very abstract (or unrelated) definitions.

Some of the answers examined are relevant with particular reference to:

- the concepts of equity of care;
- the issues related to the administration of pharmacological substances;
- the gender-based results of clinical trials;
- the limitations of a medicine which takes no account of these differences and of the need to invest in this area.

The survey allowed to understand the symbolic aspect given by HCPs to gender medicine. Through a reference to a word, an image or a color, they were asked to express a personal representation of the topic subject of investigation. The colors dominated the answers, with explicit reference to those commonly recalling the feminine sphere, like pink and lilac.

### *Gender medicine in the care setting*

The majority of interviewees reported a lack of knowledge – and even more of application – of the principles of gender medicine in the care setting. In healthcare is

common practice to refer to a "patient" or a "condition", without any reference to a distinction between sexes, and even less between genders. Therefore, a generic approach to clinical cases and their treatments prevails, especially within the therapeutic pathways, thus suppressing the culture and knowledge of gender medicine.

This certainly implies a superficial knowledge of the subject, in some cases limited to a pharmacological approach, as stated by a pharmacist. In fact, in therapeutic prescriptions the difference in pharmaceutical doses for a male and female patient is considered, but without understanding the complexity of the phenomenon of gender conditions.

A common view among interviewees is that gender medicine should be developed in all healthcare settings, although in some settings, e.g. psychiatry, it could be more difficult, for their high specificity.

Public health is defined as the healthcare context in which gender medicine has a practical application with reference to the promotion of health and disease and relapse prevention. The knowledge of the epidemiological specificities related to the different treatment methods and to male and female lifestyles would help HCPs to have a closer look to the issues related to the disease, as well as to the health outcomes and the access to care.

### *Professional practice and gender-related issues*

During the interviews, many HCPs took the opportunity to express their opinion on the relationship between professional practice and gender-related issues unrelated to the matter in hand. This is the case, for example, of the relation between an HCP and a patient of opposite gender, an issue due to the defensive attitudes, the resistance and any misunderstandings that could occur, for example, in the relationship between a female nurse and a male patient. There is also another topic that focuses on the different approaches and styles of care that differentiate the professional on the basis of gender; additionally, in some cases we witness a lower professional recognition given by patients to female HCPs. Among the main issues are the mixed rooms and non-differentiated bathrooms of some hospital wards, structural-administrative situations that undermine the privacy and the sense of decency of hospitalized people.

An observation was made about the working team in healthcare settings: while some of them acknowledged the utility of a heterogeneous group, not represented by female gender, particularly in the care-giving settings, others focused on the discriminatory issue, since we still see women having a greater difficulty in pursuing the same career paths.

### Proposals for the promotion of gender medicine

During the interviews, all HCPs agreed on the need to promote gender medicine in a practical context. Several proposals emerged during the discussions, mainly oriented to the development of targeted cultural paths, both in basic and advanced training courses, through a greater dissemination of the information available in the scientific literature on gender medicine. In particular, teaching gender medicine specifically during the basic training of healthcare professionals/medical students is one of the proposals for developing a gender medicine culture. Alternatively, they could attend workshops, to discuss clinical cases related to gender medicine while on the job. Other proposals are related to the service organization area, with the hint of development of pathways and promotion of models, like that of primary nursing, aimed at responding more comprehensively to the need of gender-specific healthcare.

### Discussion

Although in the literature there are studies reporting training experiences aimed at promoting the teaching of medicine with a view to gender difference, in particular in the academic field, there are few studies that analyze the opinion of healthcare professionals on gender medicine. Among them, the study of Cutolo et al., 2016,<sup>17</sup> that presents the results of a survey addressed to the nurses and nursing students of the University of Pisa. Similarly to the quality survey carried out here, Cutolo's results also show a lack of knowledge by professionals and students about gender medicine, as well as the lack of development of awareness about the opportunity to guide the healthcare practice while considering gender distinction.

The study of Gattino et al., 2020<sup>7</sup> presents the findings of an investigation involving general practitioners and grad students and testing their level of awareness about the paradigms of general medicine, while exploring the concept of sexism among professionals; the investigation highlighted the greater sensitivity towards the topic on the part of female professionals and grad students.

To understand this point of view, the professionals' experience and knowledge of gender medicine was the starting point to explore the training needs and *ad hoc* training project aimed at integrating a gender-oriented approach in the daily practice.

Unlike what reported by Cutolo et al. (2016),<sup>17</sup> and in accordance with Gattino et al. (2020), the professionals involved in the investigation of the Ausl of Bologna showed sensitivity to the topic, as well as the desire to explore it, despite having found a lack of – or little – knowledge about gender medicine.

Despite the lack of curricular training, the definitions emerged during the investigation are pertinent, and close to those given by the Center for Gender-Specific Medicine<sup>1</sup>; in fact, it was possible to recover these definitions of gender medicine from the answers to the survey:

- it's a new branch of medicine which also takes into account the gender of patients;
- a clinical practice which considers the differences between men and women;
- an epidemiological approach which analyzes conditions depending on sex;
- a study and analysis of pharmacological substances whose function differs based on sex.

Although gender medicine cannot be considered as a branch of medicine, since it is an interdisciplinary approach to healthcare issues,<sup>18</sup> the sample interviewed knew the area of action of this orientation. Added to this is the fact that some respondents took in consideration the issue of a low representativeness of the female population in both epidemiological studies and clinical and pharmacological trials, a well-known problem in literature.<sup>1,18</sup>

The knowledge of specialist literature is therefore discriminatory in promoting a gender-specific culture in healthcare, as expressed by some interviewees, who recounted of referring to scientific evidences related to this theme, with the aim of guiding their own clinical practice.

Training is a crucial issue, as Di Nuovo et al.<sup>19</sup> points out, since *"the implementation of training activities dedicated to healthcare professionals is an essential prerequisite for the correct application and introduction of gender medicine in health institutions"*. One of such activities is trying to promote and value targeted training events, which is considered the starting point and an essential element to make professionals aware of a gender approach.<sup>9</sup>

The WHO developed a report to describe the points constituting the core wealth of knowledge that professionals should have in the area of attention to gender.<sup>20</sup>

Several European projects have been implemented to integrate gender-oriented medicine in the study plan of universities, in order to bring students closer to this topic. They range from a gender medicine chair<sup>2,8,21</sup> to the design of online platforms for the sharing of evidence-based elements inherent to research and formation, with the integration of cases aimed at highlighting gender differences.<sup>22-26</sup> Despite WHO's appeal, there are still many university curricula which do not integrate gender medicine.<sup>12,20,21,27</sup>

Universities should integrate gender-oriented curricular studies in their courses.

The lack of specific education and research standards, the absence of clinical guidelines, along with the confusion about the terms "sex" and "gender" and the resis-

tance of some people, are the main obstacles to the change.<sup>9,14,21-24,28,29</sup>

As widely reported in the literature,<sup>1,3,14</sup> the participants in the investigation also used the terms gender and sex indistinguishably.

Another topic that emerged during the surveys concerns the connection between professional practice and gender-related relationships, with different approaches both on the part of professionals and patients.

Several studies emphasize the professional-patient relation under a gender perspective, considering also that the healthcare role is mainly occupied by women. In the care relationships there are differences in communication style, in content and in non-verbal forms between men and women, whether they are professionals or patients.<sup>7,30-32</sup> As patients, women have an increased inclination to report their stories, symptoms and feelings; this is also evident from the medical professional's perspective, where women tend to share more information with patients, encouraging them to participate in their treatment and building a stronger relationship with them. Conversely, men have a more technical and practical approach, both among healthcare professionals and patients.<sup>5,7,30-34</sup>

In care relationships we often witness the so-called gender concordance, that is, the choice of a physician of one's own gender, a phenomenon which is more frequent in women, since the woman-patient dyad lead to an approach focused on the person cared.<sup>30-33,35</sup>

Given the importance of the topic under the gender perspective, universities are invited to promote pathways to develop the main skills of listening and communication, in order to better understand the patient's needs.<sup>7,8,31,32</sup>

The qualitative survey highlights the inadequate application of gender medicine in the healthcare settings, due to a culture which tends to give priority to the condition, without considering the subject's gender. This involves important consequences, not only on a clinical level, but also in terms of organization, as in the case of mixed rooms.

Despite interviewees not having a specific training, there is agreement on the fact that the gender approach brings undoubted advantages to the treatment, with reference to the prevention of conditions and relapses, the proposal of targeted therapeutic pathways and the saving of resources. These answers are in line with what has been widely shown in reference to the suitability, equity, prevention, diagnosis and treatment.<sup>7,11-14,30</sup>

The survey highlights the need to develop targeted training activities, in order to build a community scientifically and professionally competent in the gender medicine guidelines, by enabling networks of capable professionals to promote and sensitize as many HCPs as possible.

This model is reminiscent of the Ferrarese one, approved on the occasion of the 7<sup>th</sup> Congress of International Society of Gender Medicine, as a virtuous example to which to refer.<sup>36</sup>

### Limits and potentials

The research was discussed and shared with the corporate group dealing with gender medicine. It was possible to perform the member-checking with the return of data to some of the participants involved in the survey.

The major limitations of the study are due to the sampling phase, since not all the professionals of the Ausl could be involved. There were difficulties in contacting some professionals in the educational and technical areas, in addition to not having been able to involve other medical managers from other specialties.

Two researchers analyzed the data, and for this reason there was a lower triangulation.

However, it should be emphasized that, having involved professionals from different sectors and having not put any limits on the knowledge of the topic of gender medicine, the results obtained lead to a sufficiently large and thorough description of the phenomenon subject of study.

### Conclusions

Interest in gender medicine has arisen only recently, and there is still a lot to explore.

This survey considers the perspective of the professionals who, despite having an explicit lack of knowledge of the topic, responded in a mindful and often correct manner, in particular focusing on the limits of a health practice that does not value gender differences. Hence, the need to refer to the literature, in order to implement both the scientific evidence in the clinical

#### Key messages

- There is a lack of knowledge about gender medicine among healthcare professionals.
- The opportunity to guide the healthcare practice towards gender distinction is not yet available to all healthcare professionals.
- There is a strong curiosity and desire to know and explore gender medicine.
- Gender medicine should be more widespread within the education system, both in universities and in the continuous training settings.

care field and a specific training aimed at increasing the knowledge and the awareness on this topic.

All participants showed a strong curiosity and stated their desire to know and explore gender medicine.

This topic should be more widespread within the education system, both in universities and in the continuous training settings.

Considering what emerged from this survey, it is necessary to continue to explore – through qualitative initiatives – the professionals' confidence levels, opinions and projects in the field of gender medicine. This study also shows how a qualitative approach – versus a quantitative survey – allows to collect more detailed information about the participants' experience and confidence with gender medicine.

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*Author contribution statement:* all Authors contributed in conceiving the content and in the final review of the article.

*Conflict of interest:* the Authors declare no conflicts of interest.

*Ethic statement:* the research took place according to Helsinki guidelines and was promoted by the Clinical governance of the Ausl of Bologna. Voluntary participation in the interviews occurred through invitation. All participants signed their written consent to record the discussion and publish data.

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