

cine Clinical Directors, the Società Italiana di Medicina Generale e delle Cure Primarie (SIMG) - Italian Society of Primary Health Care-, the Società Italiana di Reumatologia (SIR) - Italian Rheumatology Society-, the Associazione Italiana Donne Medico (AIDM) - Italian Association of Women Physicians - and many scientific societies. The contribution and coordination provided by the healthcare system in some Regions and with universities have also been significant. Today, in teaching medicine, the gender dimension is presented not as a separate subject, but as a facet to be developed in each subject of the curriculum.

This alliance has made Italy the European country where there is certainly more sensitivity, information and training on gender medicine.

In recent years we have also worked to raise awareness on the fact that gender medicine is not a branch of medicine in itself but a dimension that must pervade all branches of medical knowledge. That is why we want to move from a concept of gender medicine to that of generic-specific medicine, and this was the focus of the Conference in November 2017.

Finally, it should be remembered that, precisely because of the sensitivity promoted by the Study Centre on Health and Gender Medicine, in 2012 the Department of Molecular Medicine of the University of Padua founded the Chair of Gender Medicine, the first and only in Italy, which I am honoured to hold. This means that in recent years at the University of Padua there has been a dedicated course for students. This course has drawn the attention of the teaching staff at Medical School, who have alternated in teaching at numerous seminars, and who have then transferred gender differences as an absolutely essential dimension in teaching their specialties.

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FADOI and Gender Medicine

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The *Federazione delle Associazioni dei Dirigenti Ospedalieri Internisti* (FADOI) - Italian Federation of the Associations of Internist Hospital Managers - is the Italian scientific society in hospital internal medicine. In 2008, the first article "Medicina di genere, i progressi ed i problemi ancora da risolvere"¹ (Gender medicine, progress and problems yet to be solved), written with the then national president Antonino Mazzone and published in *Doctor*, marked the official beginning of FADOI's activity in this new dimension of medicine and interest has continued to grow since then. Already in 2011, in Florence, at the National Conference, with the newly established Gender Medicine Area, FADOI hosted the first meeting of scientific societies on this subject. For the first time, representatives of the main Italian scientific societies with an interest in gender medicine, the Italian National Institute of Health, the technical body of the Ministry of Health, and Giovannella Baggio, holder of the only chair in gender medicine in Italy at the University of Padua, sat at the same table to share and promote this "different" cultural approach.

In recent years, the scientific society FADOI has been deeply committed to spreading a gender culture among its members by planning training and research activities that have involved above all the younger members of the society.

FADOI's Gender Medicine Area includes physicians who have obtained a master's degree in gender medicine and a group made up of young internists from all regions of Italy, coordinated by the past president of FADOI Youth. This group has developed in the last four years

a concrete interest in gender-specific differences in all fields of internal medicine.

Since 2012, gender medicine has become a hot topic of the FADOI National Conference. In fact, five courses and two symposia have been held on gender medicine in recent years. After the first courses with lectures by national experts, a large number of FADOI representatives have been involved, presenting reports on gender differences in the various internal pathologies in which they are experts. In recent years, FADOI juniors (speakers) have also had the opportunity to measure up with seniors (discussants) on fundamental issues such as gender differences in the cardiovascular, respiratory, gastroenterological, metabolic and haematological fields, thus setting in motion a real process of literacy among hospital internists. An increasing number of gender medicine symposia or lectures have been included in the programme of regional conferences. FADOI also intends to include, from 2019, a report on gender medicine in monothematic courses and national symposia. Thanks to the junior group, FADOI's scientific work in this area has intensified. Numerous abstracts dedicated to gender medicine have been presented at the National Conference in recent years; the most deserving have been granted oral presentation and sponsorship of the speaker at the National Conference. At the same time, in the *Italian Journal of Medicine* many articles by the Gender Medicine Group have been published, considering the stratification of data by gender, i.e., with differentiated statistical revision, of important FADOI clinical trials²⁻⁴.

FADOI builds networks: training and informing

As far as training activities are concerned, at the 2nd Level Master's Course in Gender Medicine of the University of Florence, where FADOI members participate as lecturers, the Federation has sponsored the enrolment of young members of the Gen-

der Medicine group in the last two years to provide specific skills also among young internists. Finally, we would like to point out that in 2016 FADOI officially became a full member of the Italian Network of Gender Medicine, as stated in the Ministry's *Quaderni della Salute* (Health Notebooks) dedicated to gender as a determinant of health⁵.

FADOI collaborates with the *Federazione delle Società Medico-Scientifiche Italiane* (FISM) - Federation of Italian Medical and Scientific Societies - with the goal of providing training and information and ensuring appropriate knowledge on gender medicine and with the *Federazione Nazionale Ordine dei Medici e Odontoiatri* (FNOMCeO) - Italian National Federation of Medical and Orthodontic Associations (FNOMCeO) - in sharing training events.

The FADOI Gender Medicine Group has participated in European initiatives (e.g., the EUGenMed Kick-off Conference in Brussels 2014 and 2015 and the GENCAD project) and has been involved in dissemination activities by making available, translated into Italian, the information leaflets on the gender-specific differences of ischaemic heart disease, both for the public and for health professionals, directly downloadable from the FADOI website. Also in Europe, at the 7th European Congress of Gender Medicine IGM in Berlin 2015, the data of FADOI-DIAMOND processed with gender differences (3150 patients with diabetes hospitalised in internal medicine units) were presented at the plenary session.

Young people in gender medicine are also an active part of the IMAGINE group (gender group) of the European Federation of Internal Medicine (EFIM), with which a survey on the knowledge by European internists of gender differences in the most common diseases has been carried out (currently being published).

Finally, FADOI's commitment has also shape in a close link with ANIMO, the association of nurses

working in Italian internal medicine units, thus spreading the gender culture also in the nursing area.

The Law on Gender Medicine

In Italy, the application and dissemination of gender medicine in the Italian National Health System, pursuant to article 3 of Law no. 3/2018^{6,7}, is a great opportunity for scientific societies, and especially for FADOI, to ensure appropriate diagnostic and therapeutic processes. The draft bill is aimed at spreading gender medicine through "dissemination, training and indication of health practices that in research, prevention, diagnosis and treatment, take into account the differences arising from gender, in order to ensure the quality and appropriateness of services provided by the National Health Service in a uniform manner throughout the country." Specific recommendations are issued by the Ministry of Health and are addressed to the associations and rolls of health professions, scientific societies and associations of health workers not registered with associations or rolls, aimed at promoting their application throughout the country. Paragraph 1 provides: "the promotion and support of biomedical, pharmacological and psychosocial research based on gender differences". This draft bill is therefore a milestone for the tangible development of gender medicine.

Gender in Internal Medicine

The skills and activities of internists are very extensive and complex. Some examples can give an idea of the "versatility" that characterises the scientific society FADOI. Clinicians need to know the differences between men and women in symptoms, clinical presentation and response to therapy, as well as in access to services, because this is the first step in ensuring targeted diagnostic and therapeutic interventions, aimed at ensuring *fairness and appropriateness of care for all citizens*. Women are

most frequently affected by all forms of anaemia, and, in particular, sideropenic anaemia is the most common among women. There is a high incidence of asthma among young males, while females are mainly affected in adulthood and with more severe symptoms. Another clear gender-related difference concerns renal function: women have fewer nephrons and therefore a reduced ability to concentrate urine than men, with an increased prevalence of chronic stage 3 kidney disease. Women have a higher prevalence of autoimmune diseases, but lupus nephritis is more common in men and is associated with a more aggressive course. The differences in sex and gender would also seem to affect the incidence and prevalence of diabetes mellitus, although at present there is limited evidence. Autoimmune thyroid diseases are more frequent in women, but the male sex is a risk factor for thyroid cancer. Osteoporosis is more frequent in women, but is extremely underdiagnosed in men, where the risk of fractures is higher and whose outcomes are worse. Alzheimer's disease and depression are more common in women, but depression in men is accompanied by a higher risk of suicide. There are also differences between the two sexes related to the management of disease, especially in the cardiovascular field. Women with myocardial infarction and/or heart failure receive: fewer diagnostic procedures and treatments in accordance with guidelines, fewer invasive and rehabilitation treatments than men, and fewer indications for cardiac transplantation. Anticlotting treatment is prescribed less in women with atrial fibrillation, resulting in a higher probability of stroke; and women, when affected, are more often institutionalised. As we can see, internal medicine interventions include a huge variety of medical activities that require multidisciplinary attention and expertise and include gender medicine as a very important tool to achieve increasingly better appropriateness of care.

Conclusions

FADOI is a lively scientific society, attentive to new health needs, with a strong presence of young physicians and consolidated experience in the field of training and clinical research in internal medicine. In clinical research on gender differences in particular, FADOI is already extremely active with the publication of numerous scientific papers by the gender medicine group. FADOI's junior members have recently focussed on drafting reviews on gender differences in the cardiovascular, metabolic and respiratory fields^{8,9}. Current projects are related to the study of gender differences in cerebrovascular diseases, hypertension and terminal patients. The focus on differences in drug use and access to care can lead to the identification of specific future pathways. FADOI also participates in national and international calls for research in gender medicine.

One of the Society's missions in coming years will therefore be to continue to spread a gender culture, through the "promotion and support

of the teaching of gender medicine, ensuring adequate levels of training and updating of medical and health personnel" as required by Italian law, as well as attentive participation in the development of gender-specific guidelines. The vademecum¹⁰, created by FADOI and published on the website, is the most evident "message" and provides for:

- Inclusion of gender and gender differences in clinical research projects
- Description of research results in a gender-sensitive way
- Training of health professionals to know and recognize specific sex-gender differences
- Participation in primary and secondary prevention programmes and implementation of gender-sensitive treatment strategies for major pathologies in internal medicine
- Promotion of information on major internal diseases by gender

In conclusion, it is unthinkable today to believe that sex and gender are not relevant in research, diagno-

sis, treatment and health care. In order for this to happen, it is necessary for scientific societies and academia to commit themselves to spreading a gender culture. Failing to do so can only have negative influences on therapeutic appropriateness and, therefore, on the health of our own patients.

References

1. Politi C, Mazzone A. Medicina di genere, i progressi ed i problemi ancora da risolvere. *Doctor*, 15 ottobre 2008: 40-1.
2. Politi C, Ciarambino T, Franconi E, De Feudis L, Mayer MC, Martignoni A, Giovi I, Tonani M, La Carrubba S, Moretti AM, Martino C, Scanelli G. Gender medicine: an up-date. *Italian Journal of Medicine* 2013; 7: 96-106.
3. Politi C, Ciarambino T, Riva L, Frasson S, Lucci D, Gussoni G, Gonzini L, Campanini M, Gulizia M, Di Pasquale G, Mathieu G; on behalf of ATA-AF Steering Committee and Investigators. Sex-gender and atrial fibrillation treatment in the ATA-AF Study. *Italian Journal of Medicine* 2016; 10: 207-12 doi: 10.4081/itjm.2016.649.
4. Civardi G, Mordenti P, Gussoni G, Politi C, Seghini P, Pasquini MC, Marengo S, De Bastiani P, Valerio A, Fontanella A. Gender differences in pain prevalence, characteristics, assessment and treatment in internal medicine patients: a post-hoc analysis of the FADOI-DOMINO study. *Italian Journal of Medicine* 2018; 12 (3): 213-8 DOI:<https://doi.org/10.4081/itjm.2018.1008>
5. Ministero della Salute. Il genere come determinante di salute. Lo sviluppo della medicina di genere per garantire equità e appropriatezza delle cure. Quaderni del Ministero della Salute, n. 26, aprile 2016.
6. Baggio G, Malorni W. The Italian Journal of Gender-Specific Medicine and the Italian Gender Medicine Network. *Ital J Gender-Specific Med* 2018; 4 (1): 1-2.
7. Boldrini P. Approvata la legge: finalmente arriva la medicina di genere. *Ital J Gender-Specific Med* 2017; 3(3): 128-9.

Organisational chart FADOI Gender Medicine Area

Head: Cecilia Politi	President of FADOI Molise
Coordinator: Paola Gnerre	Past President FADOI GIOVANI
Master in MDG and members of the <i>IMAGINE</i> group (EFIM) European Federation Internal Medicine	Imma Ambrosino, Elena Barbagelata, Tiziana Ciarambino
Members of FADOI MDG - junior	Nunzia Barone, Piero Crispino, Silvia Di Carlo, Miriam Gino, Federica Lorenzi, Ombretta Para, Maria Cristina Pasquini, Paola Pitto, Mariagrazia Porru, Ilaria Ronga, Olivia Simone, Francesca Saladini, Claudio Tana, Carlo Zaninetti, Marta Zanon
Speakers - Discussants of FADOI MDG senior	Michele Cannone, Mauro Campanini, Andrea Fontanella, Roberto Frediani, Lucrezia De Feudis, Erica Del Signore, Giovanni Gulli, Salvatore La Carrubba, Dario Manfellotto, Alessandra Martignoni, Maria Carolina Mayer, Teresita Mazzei, Antonino Mazzone, Laura Morbidoni, Grazia Panigada, Vincenzo Patella, Piergiorgio Rabitti, Antonio Sacchetta, Giuseppe Seghieri, Giovanni Scanelli, Generoso Uomo

8. Ciarambino T, Gino M, Gnerre P, Barbagelata E, Barone N, Saladini F, Lorenzi F, Zanon M, Pasquini MC, Politi C. Young FADOI and gender medicine: sex gender differences in cardiovascular disease. *Italian Journal of Medicine* 2018; 12: 23- 31.
9. Para O, Crispino P, Barone N, Macis S, Airasca L, Gnerre P, Politi C. Sex differences in adverse drug reaction and liver disease. *Italian Journal of Medicine* 2018; 12: 15-22.
10. Vademecum FADOI per la medicina di genere. www.fadoi.org/news/vademecum-fadoi-per-la-medicina-di-genere

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Gender medicine: Pride and Prejudice

by the University Centre for Gender Medicine Studies of the University of Ferrara

On Saturday afternoon, 6 October 2018, almost two hundred people including students, health professionals, journalists and the public in general interested in the topic, were witnesses to the fast-paced series of scientific conversations in Ted Talk style, with which the University Centre for Studies on Gender Medicine of the University of Ferrara described the contents and methods of its work.

After the greetings of the delegate of the Rector of the University of Ferrara, Luigi Grassi (director of the Department of Biomedical and Surgical and Specialist Sciences), the director of the Centre of Referral of gender medicine of the National Institute of Health and external member of the University Centre, Alessandra Carè (biologist specialized in Medical Genetics) described the Italian reality, identifying subjects, research and training groups active on gender medicine and found that, thanks to the Ferrara-born Senator Paola Boldrini, present in the hall, Italian Law no. 3 requires, the only case in Europe, the application of gender medicine in clinical practice, in the training of health professionals and university students and identifies the Italian National Institute of Health as an implementing entity.

Marco Falzetti (engineer), director of APRE, the Agency for the Promotion of European Research, outlined European funding opportunities to support research and actions for gender medicine. A video presentation by Julian Little (Professor of Human Genomic Epidemiology, University of Ottawa, Canada) illustrated how, alongside the growing focus on personalised and precision medicine, the Canadian health care system is promoting gender medi-

www.fadoi.org/news/vademecum-fadoi-per-la-medicina-di-genere

