Original article

Impact of gender inequality on the educational and career development of young epileptologists in Italy: a survey of the Young Epilepsy Section – Italian Chapter

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KEYWORDS

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ABSTRACT

Objective: The Young Epilepsy Section-Italian chapter (YES-I) is the Italian section of the International League Against Epilepsy (ILAE)-YES. It was founded in 2019 with the aim of increasing the involvement of young epileptologists within scientific associations and facilitating their educational training. The Education and Career Task Force designed a survey on the impact of gender inequality on the educational and professional growth of young epileptologists.

Methods: The survey was proposed via QR code during the 43rd National Congress of the Italian League Against Epilepsy (Padua, 8-10 June 2022), and subsequently distributed via email until 7th September 2022.

Results: 73.6% of respondents were female. 51% of the entire sample answered that they found "no impact" of gender on educational activities (64.3% male against 46.1% female). Only 10% of women stated they have seen very much gender-related inequality in their education or career. However, the majority of our cohort (66%) thought that gender had a negative impact on progression within a scientific society, as well as in female leadership roles in clinical practice (67.9%). Furthermore female medical staff received little work recognition (56.6%). Lastly, 83% of responders did not have children and only 37.7% declared their colleagues to be empathic in relation to absences for family emergencies.

Conclusions: Lack of awareness of the gender inequality issue might explain inconsistencies in the findings of our survey. Despite the remarkable progress of women rights over the last century, our survey suggests that disparities in academic and decision-making roles exist also in the epileptology field.

1. INTRODUCTION

The gender difference has an increasing impact in all social areas of a woman's life including education and professional life, in science and research. This also happens in the field of Medicine and in Neuroscience, where gender inequality seems to be still an issue.

As data from American Society and Neuroscience indicate, since 2014 women have made up at least 50% of the predoctoral and doctoral workforce (1). However, as women progress through their careers, a large number leave the field and the proportion of men in positions of power sharply increases (1). In fact, the gap between male and female representation increases with seniority of the position (2,3). In addition, women are paid less given the same degree and field of work compared to men (4)**.** The salary difference between male and female scientists has been estimated by about $20,000 according to a study by Academic Medicine (5,6). Additionally, only 26% of the Research Center Grants are awarded to women, with a generally lower amount compared to men's ones ($505,271 vs $579,673 (7). Gender gap is a big deal also in research. Female authors are present as first or last contributors in significantly fewer papers than male (8). In a study analyzing neuroscience journals from 2008 to 2016, women were underrepresented in many high-profile journals, with only 29.8% of all authors being women, 33.1% of first authors being women, and 18.1% of last authors being women (9). Moreover, a study found that women had to publish three more papers in high-profile journals, or 20 more in less impactful journals, to be considered as productive as their male colleagues when applying for postdoctoral positions (10). Gender inequality seems to be present in epilepsy research as well (11). A recent study published on Epilepsia, reported that women publish fewer articles compared to men (43.8% female authors hold 39.6% of the authorships).

This evidence is also confirmed in Italy according to a survey on "Career in medicine and gender" published by Univadis/Medscape group in November 2021 (12), where emerged that only one in three women has an managerial role, with 44% of women feeling penalized in career progression, and even in the scientific field, one in five women finds it unjustifiably difficult to publish, and one in three to be invited to present her research at a conference.

The Young Epilepsy Section (YES) (13) within the International League Against Epilepsy (ILAE) (14) was developed with the aim to help young epileptologists increase their involvement inside scientific associations and to give them equal opportunities regardless of gender and workplace differences. On 26th January 2019, the first meeting of the YES-Italian branch, (YES-I) took place in Rome, Italy. In line with actions promoted by the International League Against Epilepsy ILAE-YES, YES-I's main objective is to facilitate the involvement of the Italian students, young researchers, medical physicians, nurses, EEG technicians and neuropsychologists with an interest in epileptology in the activities of the Italian League Against Epilepsy ("Lega Italiana Contro l'Epilessia", LICE). Within YES-I, the Education and Career Development Task Force has the role to promote educational activities, disseminate job opportunities or calls for doctoral bursaries, create mentor-mentee projects, and organize educational meetings (13). At the beginning of June 2022, the education and career development task force developed a survey in order to identify if and how gender differences impact educational programs, delivery of healthcare assistance, career and work-life balance of young Italian epileptologists. Collecting information on this topic might be useful in guiding the task force future activities.

2. MATERIALS AND METHODS

We proposed the survey via QR code during the 43rd National LICE Congress held in Padua, 8-10 June 2022 and subsequently we distributed by e-mail to all the LICE members up to 40 years of age until 7 September 2022.

The survey is composed of an introductory part collecting demographic data (5 questions) and a part focuses on the impact of gender in academic or career achievements, clinical practice, and leadership (15 questions), patients' and colleagues' attitudes (2 questions), and lastly personal choices and work-life balance (7 questions) (Supplementary Data).

3. RESULTS

3.1 Demographic data

We collected 53 survey responses. Among respondents, 73.6% (39/53) were female aged between 20-25 years in 2.6% (1/39), 25-30 years in 33% (13/39), 30-35 years in 30.7% (12/39) and >35 years in 33% (13/39).

Considering that there were 514 under-40 LICE member of which 363 were female and 149 males, the survey response rate was 10.3% of which 10.74% were female and 9.36% male. Responders mainly came from northern Italy (31/53, 58.5% of the sample). Regarding current working positions, the cohort was mainly 90.6% (48/53) represented by trainees or consultants. There were no responders among students or other healthcare professionals. The responders were almost equally distributed between pediatric and adult epileptologists, 49% (26/53) and 45% (24/53), respectively, while the remaining 5.6% (3/53) worked in both. However, while 25/39 women (64.1%) worked in pediatric epileptology, the majority of men (12/14, 85.7%) worked as adult epileptologists.

3.2 Experience of gender inequality

The first two questions of our questionnaire inquired direct (personal) experience or indirect (towards a colleague) experience of gender inequality.

Regarding direct experiences, 37.7% of responders (20/53) claimed to have had "a little" experience of gender inequality, with similar rates among female 38.5% (15/39) and male 37.5% (5/14) and 32.1% (17/53) "no experience" (23% of female-9/39 versus 57.1% of male-8/14). Higher rates of direct experience of gender inequality (collecting "to some extent" and "very much" answers) diverged more between female 38.4% (15/39) and male 7.1% (1/14) respondents (Fig.1).

On the contrary, most responders 35.8% (19/53) experienced indirect gender inequality "to some extent" (41% of females-16/39 and 21.4%of males-3/14), followed by 32.1% (17/53) affirmed they had "a little" experience (28.2% of females versus-11/39 and 42.8% of males-6/14) and 26.4% (14/53) no experience. Only 5.7% (3/53) reported to having "very much" experienced indirect gender inequality (7.7% of female responders-3/39 versus no males-0) (Fig.1).

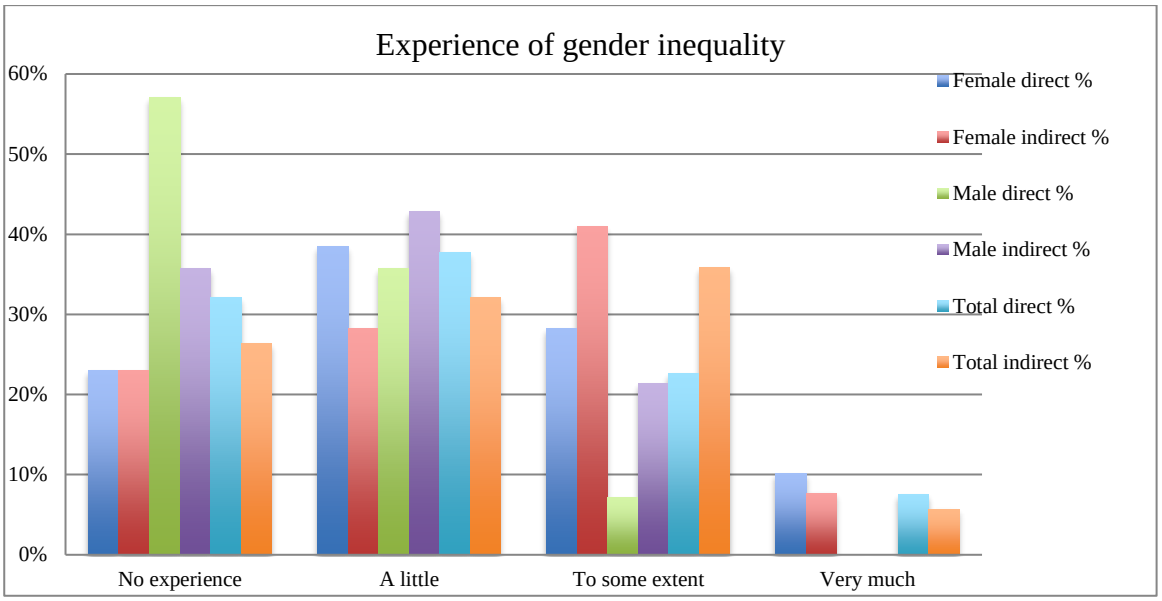

Fig. 1 Direct and indirect experience of gender inequality. The figure shows direct (personal) or indirect (towards a colleague) experience of gender inequality in our cohort (total, female, male). The majority of responders claimed that they had "no" or "a little" direct (personal) experience of gender inequality. Instead, the indirect towards a colleague) experience was "to some extend" for the majority and female responders, in particular, experienced indirect gender inequality "very much".

3.3 Impact of gender on educational activities and scientific publications.

About the impact of gender on educational activities, most of our cohort (51% - 27/53) replied they find "no impact" (46.1%-18/39 female epileptologists versus 64.3%- 9/14 male young epileptologists) (Fig. 2).

The impact of gender is perceived "in the involvement in clinical activity" by 20.7% (11/53) (female 23%-9/39 versus male 14.3%- 2/14) and "in the involvement in research activity" in 17% (9/53) (female 7/39 - 17.9% versus male 2/14 -14.3%) (Fig.2).

Only 5.6% (3/53) thought that gender plays a negative role in "scientific publications" (these are all women 7.7%-3/39) and in the "participation to congresses and courses" (5.1%-2/39 of the female respondents versus 7.1%-1/14 of male respondents). 20.7% (11/53) stated that "participation of persons of the opposite sex is preferred", and this is stated by 23%-9/39 of women and 14.3%-2/14 of men (Fig. 2).

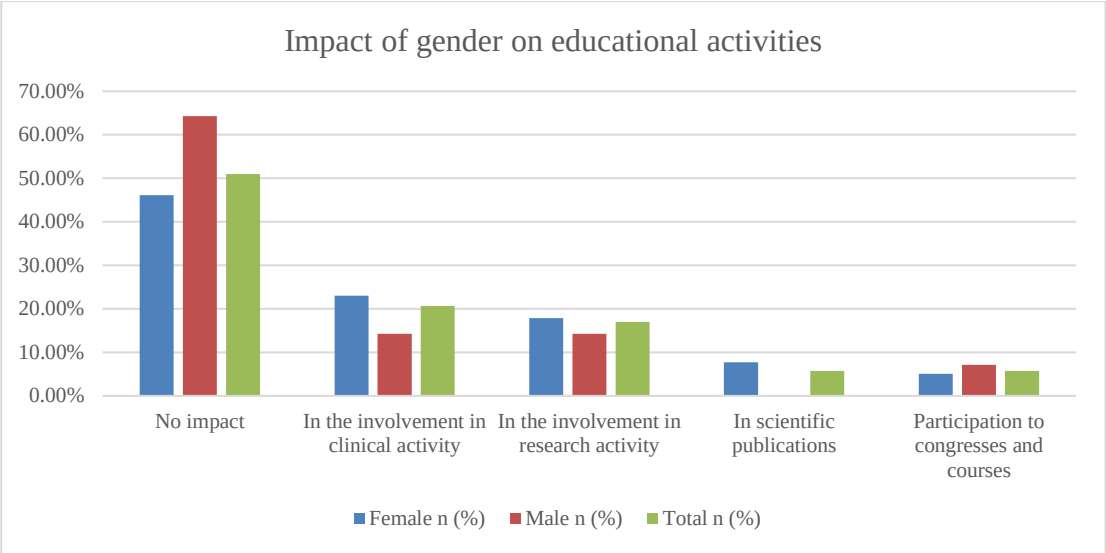

Fig. 2 Impact of gender on educational activity. The figure shows that for the majority of young Italian epileptologists, gender has no impact on educational activities. The impact of gender is perceived in particular "in the involvement in clinical activity" and "in the involvement in research activity" with higher percentage in women than men.

Regarding the impact of gender on scientific publications, the majority (69.8% - 37/53) believed they perceive "no impact" (66.7% - 26/39 of women versus 78.6% - 11/14 of men). 26.4% (14/53) thought that there is an impact "on the choice of the order of authors" (33% - 13/39 of women versus 7.1% - 1/14 of men) and 3.8% (2/53, both men) "on the type of authors". On the contrary, no one chose the answer "in the choice of the journal" (that means for example choice of journal with smaller Impact Factor).

The same applied to the involvement in research activities, in which 66% (35/53) of responders thought there is no impact of gender (61.5% - 24/39 of women and 78.6% - 11/14 of men). Only 18.9% (10/53) thought there is an impact on the division of tasks with redirection to non-decision-making roles, such as compiling a database (20.5% - 8/39 of women versus 14.3% - 2/14 of men), or a difference in the planning phase (7.7% - 3/39 of women and 7.1% - 1/14 of men), in the discussion phase (7.7% - 3/39 of women but no men) or in the writing phase, again with a shift towards non-decision-making roles (2.6% of women - 1/39 versus no men) (Fig.3).

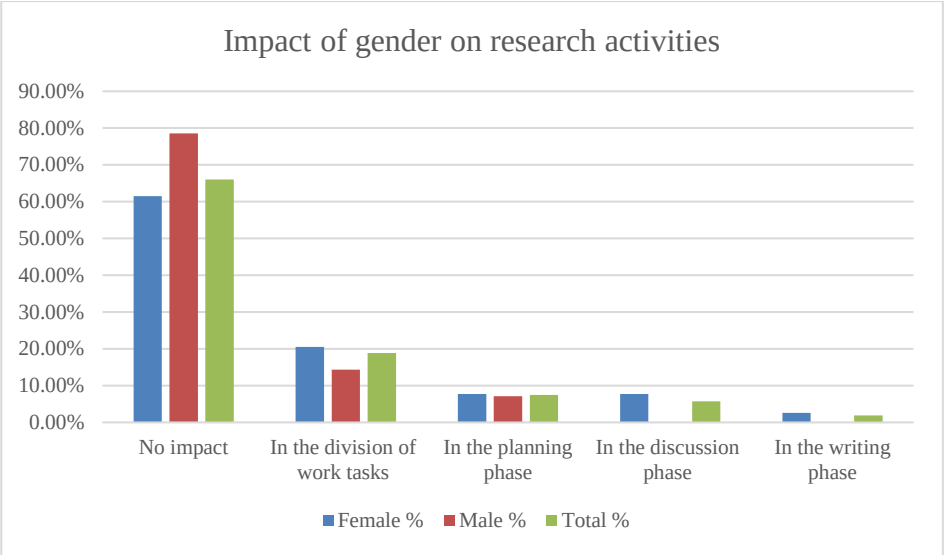

Fig.3 Impact of gender on research activity. The figure shows that for the majority of young Italian epileptologists, gender has no impact on research activity. Only 18.9% believes there is an impact on the division of tasks with redirection of women to non-decision-making roles, such as compiling a database.

3.4 Academic or career achievements

Most of our cohort has not completed or entered a PhD program (39/53, 73.6%), with similar rates among women (74.4% - 29/39) and men (71.4% - 10/14). The 20.5% - 8/39 of women and the 7.1% -1/14 of men thought that gender has no impact on the outcome of PhD entry test, and the 10.2% - 4/39 of women and 21.4% - 3/14 of men believed it has little impact. Our sample mainly thought that gender has influenced their career achievements “a little” (50.9% - 27/53), or “not at all” (32.1% - 17/53) (Fig.4).

However, this was perceived differently according to gender: “no impact” is chosen by 28.2% - 11/39 of women and 42.8% - 6/14 of men, “a little” by 48.7% - 18/39 of women compared to 57.1% - 8/14 of men. Only women thought that gender influenced their career “to some extent” (8/39 women, 20.5%) or even “very much” (1/39, 2.6%).

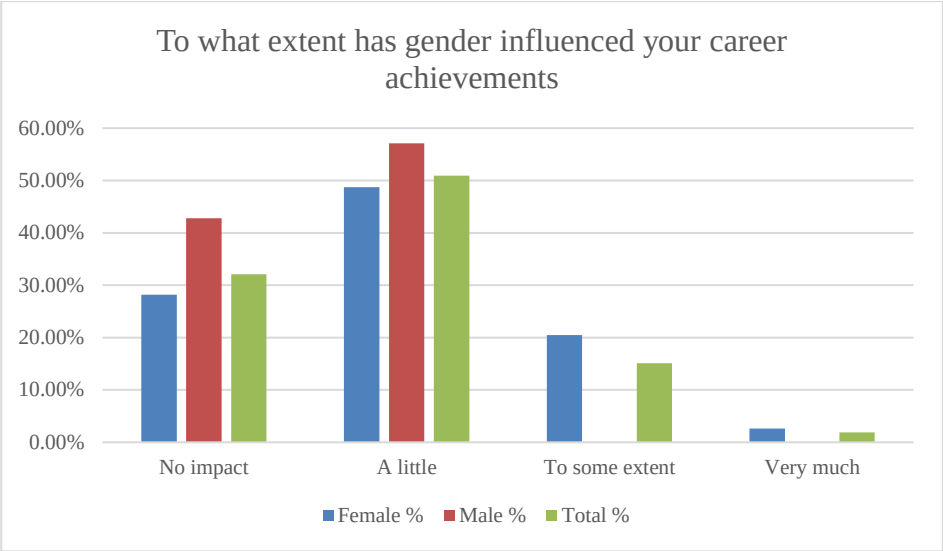

Fig. 4 Influence of gender in career achievement. The figure shows the extent to which young Italian epileptologists thought gender influenced their career progression. Our sample mainly thought that gender has "a little" or "not at all" influenced their career achievements. However, this was perceived differently according to gender: only women think that gender influenced their career "to some extent" or even "very much".

The impact of gender was "neither negative nor positive" for 39.6% (21/53) respondents (35.9% - 14/39 of women and 50% - 7/14 of men), "no impact" is seen in 26.4% - 14/53 (30.7% -12/39 of women and 14.3% - 2/14 of men), while a "negative impact" is reported by 24.5% (13/53) (33.3% - 13/39 of women and no men) and a "positive impact" by 9.4% (5/53) of cases (35.7% - 5/14 of men and no women).

The majority (35/53, 66%) of our cohort thought that gender has a negative impact on career progression within a scientific society, and this opinion was more common among women (28/39, 71.8%) compared to men (7/14, 50%) (Fig. 5).

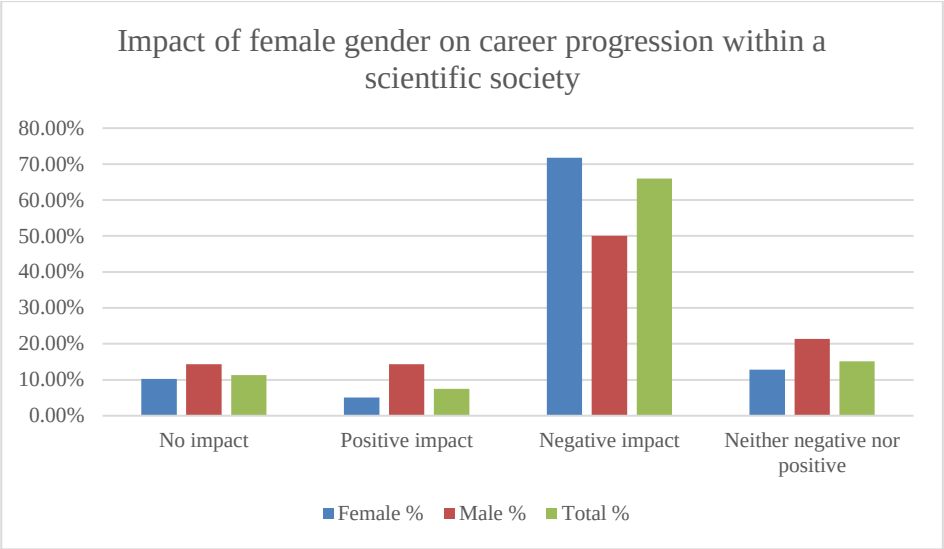

Fig. 5 Impact of female gender on career progression within a scientific society. The figure shows that for the majority of our cohort, the female gender would have a negative impact on career progression within a scientific society. This opinion is more common among women (71.8%) than men (50%).

3.5 Clinical practice and leadership

52.8% (28/53) replied that gender has “no impact” on clinical activities (48.7% - 19/39 of women and 64.3% - 9/14 of men). It resulted in “less decision-making roles in the diagnostic pathway” for 11.3% 6/53 (4/14 men corresponding to 28.6% of men and 2/39 women, corresponding to 5.1% of women), and “less decision-making roles in the therapeutic pathway” for 5.6% - 3/53 (2/39 -5.1%- women against 1/14 -7.1%- men).

According to 12/39 (30.7%) surveyed women epileptologists (but no men), gender affected discussions with consultants from other units and according to 4/39 (10.2%) it affected case discussion during ward briefing.

Females had “to some extent” decision-making roles for 41.5% (22/53, 8/14 men corresponding to 57.1% and 14/39 women corresponding to 35.9%), “a little” for 37.7% (20/53, 2/14 men corresponding to 14.3% and 18/39 women corresponding to 46.1%), “not at all” for 11.3% (6/53, 1/14 men corresponding to 7.1% and 5/39 women corresponding to 12.8%), and “very much” for 9.4% (5/53, 3/14 men corresponding to 21.4% and 2/39 women corresponding to 5.1%).

However, female medical staff received “little” work recognition compared to male personnel according to 56.6% (30/53) of responders, (female 64.1% - 25/39 versus male 35.7% - 5/14), they received "to some extent"

the same recognition as men for 35.8% - 19/53 (11/39 women -28.2%- and 8/14 men -57.1%), not at all 7.5% - 4/53 (7.1% - 1/14 of male and 7.7% - 3/39 of female subjects).

For leadership roles, female doctors were hardly considered according to most of the responders: “a little” in 67.9% (36/53) (with women choosing this answer in 69.2% - 27/39 of cases and men in 64.3% - 9/14) and “not at all” in 3.8% (2/53, both women), while only 24.5% (13/53) believed that females are considered "to some extent"(25.6% - 10/39 of female and 21.4% - 3/14 of male subjects) (Fig. 6). Only two men (14.3%) but no women thought that women are considered “very much” the same as men for leadership positions.

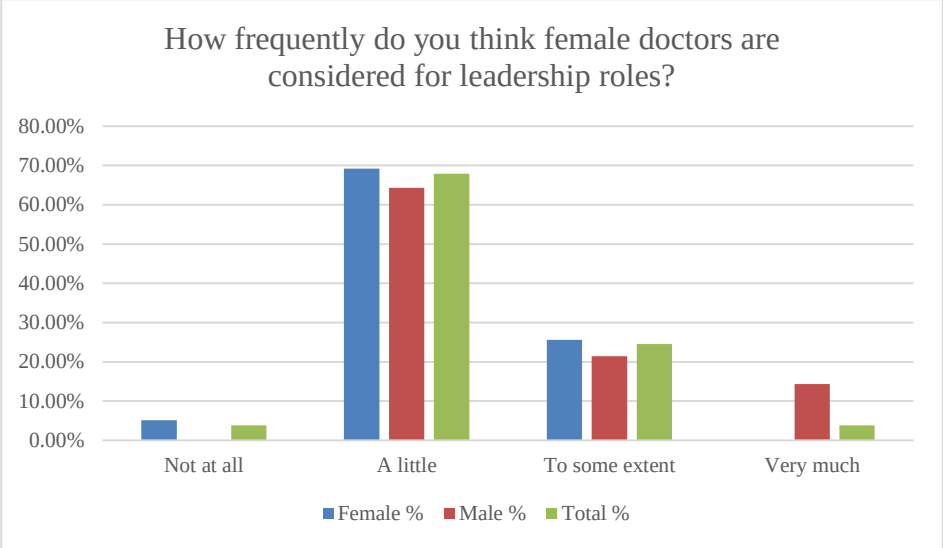

Fig. 6 How frequently female doctors are considered for leadership role. The figure shows the influence of gender in leadership role. The majority of responders stated that women are considered in a leadership role “a little” or “not at all”.

3.6 Patients’ and colleagues’ attitudes

Colleagues’ attitudes towards episodes of gender inequality reveals that for the majority of our cohort, colleagues of the opposite sex were “neither empathic nor hostile” (43.4% - 23/53: female 48.7% - 19/39 against male 28.6% - 4/14).

15.1% (8/53) of responders affirmed that colleagues are “very empathic” (males: 21.4% - 3/14; females: 12.8% - 5/39) and 7.5% “hostile” (4/53): with a similar percentage between female (7.7% - 3/39) and male (7.1% - 1/14).

However, “empathic enough” and “very empathic” were chosen by 43.5% (17/39) of women versus 64.2% (9/14) of men. In relation to absences for family emergencies, only 37.7% (20/53) declared their colleagues to be empathic (50% of male (7/14) and 33% of female one (13/39). Furthermore, regarding the relationship with patients, while 50% of men (but no women) were never mistaken by other (non medical) healthcare professionals, women reported they are often (26/39, 66.7%, versus 3/14, 21.4% of men) or always (4/39, 10.2%, versus no men) considered by patients as non-medical healthcare professionals (e.g. nurses).

3.7 Personal choices and work-life balance

75.5% of respondents (40/53) had a partner: 79.5% of female (31/39) and 64.3% (9/14) of male subjects. Working influenced this decision “to some extent” in 37.7% (20/53) of our sample (38.5% females, 35.7% males), “not at all” in 26.4% (14/53) (25.6% of female and 28.6% of male doctors), “a little” in 22.6% (12/53) 25.6% of women and 14.3% of men) and “very much” in 13.2% (7/53), of whom 4/39 (10.2%) were women and 3/14 (21.4%) were men.

83% (44/53) did not have children, and the proportion is higher among men (92.9% - 13/14 versus 79.5% - 31/39 among women). Work influenced this decision “to some extent” in 32.1% (17/53): 35.9% - 14/39 of women and 21.4% (3/14), “not at all” in 26.4% (14/53), of whom 5/14 were men (35.7%) and 9/39 were women (23%), “a little” in 24.5% (13/53): 25.6% - 10/39 in female subgroup and in 21.4% (3/14) male subgroup and “very much” in 17% (9/53), of whom 3/14 (21.4%) were men and 6/39 (15.4%) were women.

Finally, when both parents of the couple work in a couple, the decision on who will be absent from work for “household emergencies” is divided as follows: 62.3% (33/53) “we alternate equally” (chosen by 64.1% - 25/39 of women and 57.1% - 8/14 of men), 13.2% (7/53) “the female partner” (chosen by 15.4% -6/39 of women and 7.1% - 1/14 of men), 13.2% (7/53) “the partner who has a part-time/lower wage job” (chosen by 28.6% - 4/14 of men and 7.7% - 3/39 of women).

4. DISCUSSION

Our survey analyzed gender inequality in a sample of young Italian epileptologists. The fields we investigated included academic and career achievements, clinical practice and leadership, patients’ and colleagues’ attitude, personal choices and work-life balance.

The sample was composed of 39 female and 14 male young epileptologists (73.6% vs 26.4%). This female preponderance among responders outweighs the proportion of female doctors among young Italian epileptologists, suggesting a higher propensity of female young epileptologists to take part to this survey.

More than 50% of respondents stated they have not seen any gender-related inequality in their education or career (either directly or indirectly). However, these results are in contrast with their answers on career progression, as 66% of respondents think that being a woman has a negative impact on career progression in scientific societies and 34% that it shifts to non-decision-making roles when involved in research activities. This inconsistency might be due at least partly to a lack of gender inequality awareness in the interviewed population, resulting in gender inequalities not being explicitly acknowledged in more generic questions, but clearly emerging from subsequent, more specific, questions. Unconscious (implicit) gender bias is an increasingly recognized issue in workplaces (International Labor Organization), affecting the way information is processed, resulting in unintended disparities in behavior, decision-making and interactions, which negatively impact both patient care and career progression (15). The lack of an explicit control makes it particularly insidious, as behaviors resulting from implicit bias may tend to be more persistent and harder to correct (16). Furthermore, the literature rebuts the previous results and support the latter: Bendels et al., have analyzed scientific authorships and they found that there is an apparent lack of female research leaders, while other studies showed lower acceptance rate for papers with a female last author (17), lower recognition of their contribution (18,19); lower acceptance rate for funding (7,20,21); lower rate of invitation to conferences or workshops (22). The United Nations, Educational, Scientific and Cultural Organization's Women in Science data show that less than 30% of the world's researchers are women, only 19% in south and west Asia, 23% in east Asia and the Pacific, 30% in sub-Saharan Africa, 32% in North America and western Europe, and 45% in Latin America (23) and although the proportion of female researchers is increasing worldwide, on average they publish fewer research papers than male ones (24).

Regarding career progression in scientific societies, it is noteworthy to underline that our respondents' point of view is supported by previous evidence, documenting (in 2015) that only 15% of presidents of professional medical societies were women, in spite of representing 34% of the physician workforce (25).

As far as our scientific society is involved, LICE is currently run by its first female President in 51 years, as well as the ILAE has the first female president 2021-2025 term (26, 27).

Other significant results regarding gender inequality emerged in clinical activity. These data on gender inequality are confirmed by various authors, even in terms of salary (28) and lower chances of being hired for tenure-track positions at the same competence level (29).

The lack of women representation in leadership positions in Italian medicine has been studied with a survey in the Lombardy region, documenting that women are less likely to be promoted from the early to the mid-level of the career ladder, whereas no significant disadvantages are documented in the steps from vice to head (30). According to the author, this is attributable to a "sticky floor effect". Interestingly, gender inequalities and obstacles to career progression seem to be less marked in highly skilled professions, and in more competitive organizations and specialty areas, due to the highly selected and career-oriented nature of studied populations, than in the general labor market (31). Another Italian research, conducted by Univadis Medscape Italia, investigates the Italian situation in terms of gender equity in medicine (career, children and family, treatment at work) through a questionnaire and it shows similar results to our survey in terms of family management and leadership roles, to the detriment of the female sample and a greater awareness of this topic in the new generations of doctors (32).

The European Society for Medical Oncology Women for Oncology (W4O) Committee undertook a survey of female and male oncologists in 2016 (33); the results of this study were that women oncologists were less likely to have leadership roles and they felt that their gender affected adversely their career; the authors gave also some suggestions supporting career development for equity between male and female oncologists.

In Canada a recent study regarding cardiovascular medicine, surgery and science is conducted through an equity survey analysis (34) that finds a lower percentage of women in CV landscape (medical, surgical, and research careers) despite the sex parity seen at medical and graduate school.

In 2018 a study regarding the Columbia University Irving Medical Center leadership roles showed that only 11% of Physician and Surgeon departments and only 13% of centers were of women, with leadership equity in pediatric and obstetric and gynecology, where women represented half of division chief roles (35). Other

authors have reported that in United States female surgeon-scientists receive fewer and smaller National Institutes of Health (NIH) funding grants compared with male surgeons (36).

In 2019 The Lancet dedicated an entire issue on advancing women in science (35, 37) and also the Medical Journal of Australia raised the topic of gender inequity in medicine and medical leadership (38). Regarding Australia and New Zealand, in particular, a survey based study on the Australian and New Zealand Society of Nephrology shows that the majority of member respondents recognized inequities, particularly relating to gender, ethnicity and career responsibilities, and half had personally experienced inequity in the workplace (39). Instead another survey written by Pakistan authors (40) on gender discrimination against female surgeons highlights that most of females does not recognize gender bias although they identify discriminatory aspects in the divisions of roles at work. These results, in agreement with ours, make us reflect that rather than generic questions, more specific ones may be useful in order to guide the interviewees regarding gender inequity.

Regarding the relationship with patients, 54.7% of the sample is often mistaken for another healthcare professional, but colleagues experience gender inequality with indifference for almost half of the analyzed sample. This confirms the lack of knowledge in terms of gender inequality already described in the literature (41,8). Our data are in keeping with previous literature, demonstrating a worrying gender bias among patients, with 65% of female doctors versus 0 males having their role misidentified at least once a week and 62% of female doctors (versus 8% of male doctors) being asked to perform non-medical tasks (42).

While female doctors are often mistaken for nurses, male staff members and male students tend to be mistaken for doctors, despite the presence of clearly leading female senior staff (43,44).

Patients were found to be 17.1% significantly less likely to recognize female consultants as leaders compared with males, and 14% significantly more likely to recognize female nurses as nurses compared with their male counterparts (43). Importantly, evidence coming from the literature suggests that repeated, although subtle, discriminations and marginalisations can result in a significant cumulative effect on women's careers (45).

As far as personal choices are concerned, the majority of the sample interviewed has no children (83% 44/53) and reports that work has influenced this decision to a moderate-to-big extent for 49% (26/53), Of note, these figures correspond to 51.3% of women and 42.8% of men. As reported by different authors, the parenthood is an area where women and men continue to have different responsibilities with a higher mother involvement

(46), profession has a significantly higher influence on women's choice of childbearing than men's and the rate of career switching is higher for female postdoctoral researchers who are planning to (or already) have children than for men in similar circumstances (47). On the contrary, the proportion of young epileptologists stating that being a doctor has “very much” influenced their decision to get or not to get married is higher among men (21.4% versus 10.2% among women). As we did not explore the reasons behind this choice in our survey and we are not aware of similar reports in previous publications, we are unable to provide an explanation for this finding. With our survey, we confirmed important differences in perception of gender inequalities among women and men: only women state to have experienced a high rate of direct and indirect episodes of gender inequality, and men often carry a more optimistic point of view compared to women regarding the impact of gender on career achievements, recognition for women’s work, decision-making roles, consideration for leaderships roles. Again, men do not perceive an impact of gender in discussions between colleagues, which, on the contrary, a relevant percentage of women point out. Young women epileptologists’ position is corroborated by the literature (48). As an example, female neurosurgeons feel less accepted by colleagues and less treated equally by supervisors compared with their male colleagues. Most female respondents strongly agreed that their gender is sometimes a disadvantage in career progression (48).

In summary, our survey confirms that there is still a gender gap in the medical profession and in the academic career. Moreover, this is the first study analyzing this issue among young Italian epileptologists.

In the literature, some solutions have been proposed to tackle different aspects of gender bias at the institutional, organizational, and individual levels. For example, changes in institutional and departmental structure and culture to develop female faculty value systems are the first, important steps. Mentoring and strong leadership to support and promote women's work and sense of voice have been among the most important factors in retaining women scientists in the field. At an individual level it could be important to train people on gender inequality so that they can be aware of their own and others’ biases and report when they are involved or witness one.

5. CONCLUSION

Gender equality is a human right (49), but also important for the best research and clinical practice. Although there is still a long way to go to change the male dominant culture (50), there is a rise in awareness of this issue

and the situation is slowly improving (51). Our survey confirms the literature studies adding the point of view of young Italian epileptologists. We believe that continuing current efforts, while bringing men and women together, will be the key to a more equitable and creative research and work community.

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DECLARATIONS OF INTEREST

Neither of the authors has any conflict of interest to disclose.

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