

Female Representation and Position Based on Facts and Members Views in the European Society of Coloproctology

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See “Editorial” on page 256.

BACKGROUND: There is wide variation in gender distribution in colorectal surgery across different European countries.

OBJECTIVE: This study aimed to evaluate female representation, implicit bias, and members’ perception on female participation and representation at the European Society of Coloproctology 2017 annual scientific meeting.

DESIGN: This was a retrospective mixed-methods cross-sectional observational study.

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SETTINGS: The study was conducted using data from the 2017 European Society of Coloproctology annual scientific meeting program and attendees.

MAIN OUTCOME MEASURES: The primary outcome measure was the percentage of female speakers in the formal program and assessment for implicit bias. Secondary outcomes were the percentage of women attending the conference, the percentage of women serving on committees, and the results of the online survey.

METHODS: Female representation was retrospectively quantified by role, session type, and topic. Implicit bias was measured classifying the introductions of speakers by moderators as formal (using a professional title) or informal (using name only), then further stratified by gender. An online survey was disseminated and analyzed to investigate the members’ perception as a benchmark analysis.

RESULTS: Disparities were found between sexes, with fewer women attending the conference (25%), serving as session chairs (8%), speakers (21%), and on committees (10%) compared with men. There were no differences across sexes regarding the formal or informal introduction. The survey among our members showed that significantly fewer women felt equally endorsed within the society compared with men (33% versus 63%; $p < 0.001$).

LIMITATIONS: The retrospective design with data available to be analyzed was limited by the sessions recorded (27/49) and survey respondents (28%).

CONCLUSIONS: Female representation within European Society of Coloproctology as chair, speaker, attendee,

and committee member was much lower than male representation, both in absolute numbers and relative to membership. Greater awareness of this disparity and inclusiveness are aims of our society. The impact of these initiatives will be determined by reevaluating these metrics at the 2020 annual meeting. See **Video Abstract** at <http://links.lww.com/DCR/B384>.



REPRESENTACIÓN Y POSICIÓN FEMENINA EN LA SOCIEDAD EUROPEA DE COLOPROCTOLOGÍA BASADA EN LOS HECHOS Y LAS OPINIONES DE SUS MIEMBROS

ANTECEDENTES: Existe una amplia variabilidad en la distribución de géneros en la cirugía colorrectal en los diferentes países de Europa.

OBJETIVO: Evaluar la representación femenina, el sesgo implícito y la percepción de los miembros sobre la participación y representación femenina en el 12° Congreso científico anual de la Sociedad Europea de Coloproctología.

DESIGN: Este fué un estudio observacional retrospectivo de métodos mixtos transversales.

AJUSTES: Los análisis se realizaron utilizando los datos del programa científico de la reunión y los datos de los presentes en el Congreso de la ESCP en 2017.

MEDIDAS PRINCIPALES DE RESULTADOS: La principal medida en el resultado fue el porcentaje de disertantes femeninas en el programa definitivo y la evaluación del sesgo implícito. Los resultados secundarios fueron el porcentaje de mujeres que asistieron a la conferencia, trabajaron en los comités y los resultados de la encuesta informática.

MÉTODOS: La representación femenina se cuantificó retrospectivamente según el rol, tipo de sesión y temas. Se midió el sesgo implícito clasificando las introducciones de los disertantes por parte de los moderadores de manera formal (usando un título profesional) o informal (usando solamente el nombre), y luego fueron estratificadas por género. Se difundió y analizó una encuesta informática para investigar la percepción de los miembros como análisis de referencia.

RESULTADOS: Se encontraron disparidades de género, con menos mujeres presentes en la conferencia (25%), obrando como presidentes de sesión (8%), como disertantes (21%) y como miembros de comités (10%) comparadas con los hombres. No hubo diferencia entre sexos con respecto a la introducción formal o informal. La encuesta informática entre los miembros mostró significativamente que menos mujeres se sentían respaldadas igualitariamente dentro de la sociedad comparadas con los hombres (33% frente a 63%, $p < 0.001$).

LIMITACIONES: Diseño retrospectivo de datos limitados a las sesiones grabadas (27/49) y a los encuestados (28%) disponibles para el análisis.

CONCLUSIONES: La representación femenina dentro de la Sociedad Europea de Coloproctología como presidente, disertante, asistente ó como miembro del comité fué mucho menor que la representación masculina, tanto en números absolutos como en relación con la membresía. Crear una mayor conciencia de esta disparidad de inclusión son prioridad en nuestra sociedad. El impacto de estas iniciativas se determinará re-evaluando estas variables en reuniones futuras. Consulte **Video Resumen** en <http://links.lww.com/DCR/B384>. (Traducción—Dr. Xavier Delgadillo)

KEY WORDS: Colorectal surgery; Gender bias; Gender equity; Implicit bias.

There has been increased attention on the subject of women in positions of power or influence that were previously considered unfavorable or even unsuitable for women. This attention was intensified by social media movements, such as #NYerORCoverChallenge, #HeforShe, and #ILookLikeASurgeon, as well as the *Lancet* edition “Advancing women in science, medicine, and global health.”¹ These initiatives have shed light on ongoing gender and diversity issues.² These issues remain present in surgery and, specifically, colorectal surgery.

In 2016 the majority of the European Union member states had a higher number of female than male physicians; this is in line with the female predominance of medical students reported in Western European countries for at least a decade.^{3,4} There is variation internationally in female representation in surgery. In 2019, 26.2% of Dutch surgeons are women (Dutch Society of Surgery, Membership data, unpublished, 2019).⁵ In Spain, 36% of the Spanish Society of Coloproctology are women (Spanish Society of Surgery, Membership data, unpublished, 2019). The United States has 19% female surgeons.⁶ Although the United Kingdom is regarded as a progressive nation for gender and diversity, only 12.9% of consultant surgeons are women, compared to 54% of the house officers in surgery in training.^{7,8} Thus, women may have come a long way, but have a long way to go. The recent report on female representation at the American Society of Colon and Rectal Surgeons’ (ASCRS) annual meeting is proof of this.⁶

With the report of female representation at the ASCRS annual meeting, it was highlighted that little is known about the participation and representation of female surgeons in colorectal surgery in the European Society of Coloproctology (ESCP).⁶ European Society of Coloproctology is the largest European colorectal society, founded by the merger of European Association of Coloproctology and European Council of Coloproctology in 2005. The ESCP annual meeting attracts global participation beyond Europe, with attendance increasing annually, and is

now the most visited scientific meeting in Europe within the field of coloproctology. In 2017, ESCP attendance was comparable to ASCRS. With these similarities and the importance of the subject matter, comparing the representation, role, and members opinions of women in ESCP is merited.

Our goal was to evaluate the female representation within the ESCP in 2017. Our hypothesis was that women are underrepresented as members, and in leadership, committee, and presenter roles in ESCP and at the ESCP annual scientific meeting. In advance of this analysis, we conducted a survey among all ESCP members to investigate, as a benchmark analysis, the member's perception regarding the current gender distribution and the readiness for change related to more equity in gender distribution.

MATERIALS AND METHODS

We followed the analysis of female representation at the 2017 ASCRS annual and Tripartite meeting by Davids et al⁶ as a template for our study.

Demographics and Program Analysis

Demographic data (gender, position, and country of residence) from all members and attendee registrations from the 12th ESCP annual meeting in Berlin, Germany, from September 27 to 30, 2017, were obtained anonymously through and with permission from ESCP. The online-available formal program of the meeting was reviewed by R.J.R. and Y.v.L. (see appendix 1 <http://links.lww.com/DCR/B382>). Names of the speakers and chairs in this program were used to identify the percentage of female representation. In cases where gender was not known or registered, photo and name were used in online searches through Google and Gender API (<https://gender-api.com>) to determine the gender. Chairs were defined as debate or symposia moderators or introducers. Speakers were defined as the presenters of lectures and correlated to the category of debates or symposia.

Presenter Introductions

The ESCP online-accessible video <http://links.lww.com/DCR/B384> archive was used to determine the introductions of the presenters. All available videos from the 2017 conference were analyzed. Introductions of the speaker by the chair were coded as formal or informal. Formal introductions were defined as inclusion of the speaker's professional academic title by professor or doctor. Informal introductions were defined by the use of first name with or without last name, without a formal title, other denotations such as "she" or "he," or any other colloquialisms. Speakers who did not hold advanced degrees were excluded from further analysis.

Survey

An online survey among all ESCP members was distributed per e-mail in September 2019. The survey was answered anonymously. The topics of the questions contain 3 sections:

1. current perception of women at annual ESCP meetings by estimating numbers of female attendees and speakers
2. perceived opportunities/endorsement to develop one's talent or strength within our society
3. aspect of gender balance and its value to our society

The primary outcome of the study was to evaluate the percentage of women in the formal program, stratified by subject matter, role as speaker or moderator and session type, and to assess for implicit bias using speaker introductions. Secondary outcomes were the percentage of women attending the conference, percentage of women on the different committees within the ESCP, and the results of our online survey.

RESULTS

Conference Registration and ESCP Demographics

In 2017 ESCP had a total of 1384 members, of which 26% were women. Detailed information about the level of training or professional role was unavailable. A total of 1686 attendees (n = 425, 25.5% female and n = 1261, 74.8% male) were registered for the 2017 ESCP annual scientific meeting, which is in line with the percentage of female ESCP members in 2017. Data on ESCP membership could be retrieved for 1346 of 1686 attendees. Of the 1346 attendees, 48.7% (655/1346) were ESCP members and 51.3% (691/1346) were nonmembers. Detailed professional information was available for only 201 attendees (93 women); these numbers were deemed too small to be representative for the entire group or draw conclusions.

Geographic distribution was analyzed; strong representation of attendees from the Netherlands, United Kingdom, Germany, Denmark, Belgium, and Italy was found. From countries outside Europe, high rates of attendees were from Korea and China. An overview is found in Figure 1.

Program Representation by Gender

The ESCP Program Committee was composed of 1 female chair, 1 male past president, 1 male president in waiting, 1 male secretary, 1 female assistant secretary, 1 male president, 1 male president elect, 1 male international liaison, and 12 male members. Table 1 gives an overview of the gender distribution of all the committee members in the ESCP committees.

An overview of gender distribution defined by role (speaker or chair) is shown for different session types and formats in Table 2. The program consisted of 74 chairs, 8.1% (6/74) of them were women. From all of the 187 speakers, 20.8% (39/187) were women. The proportion of women as

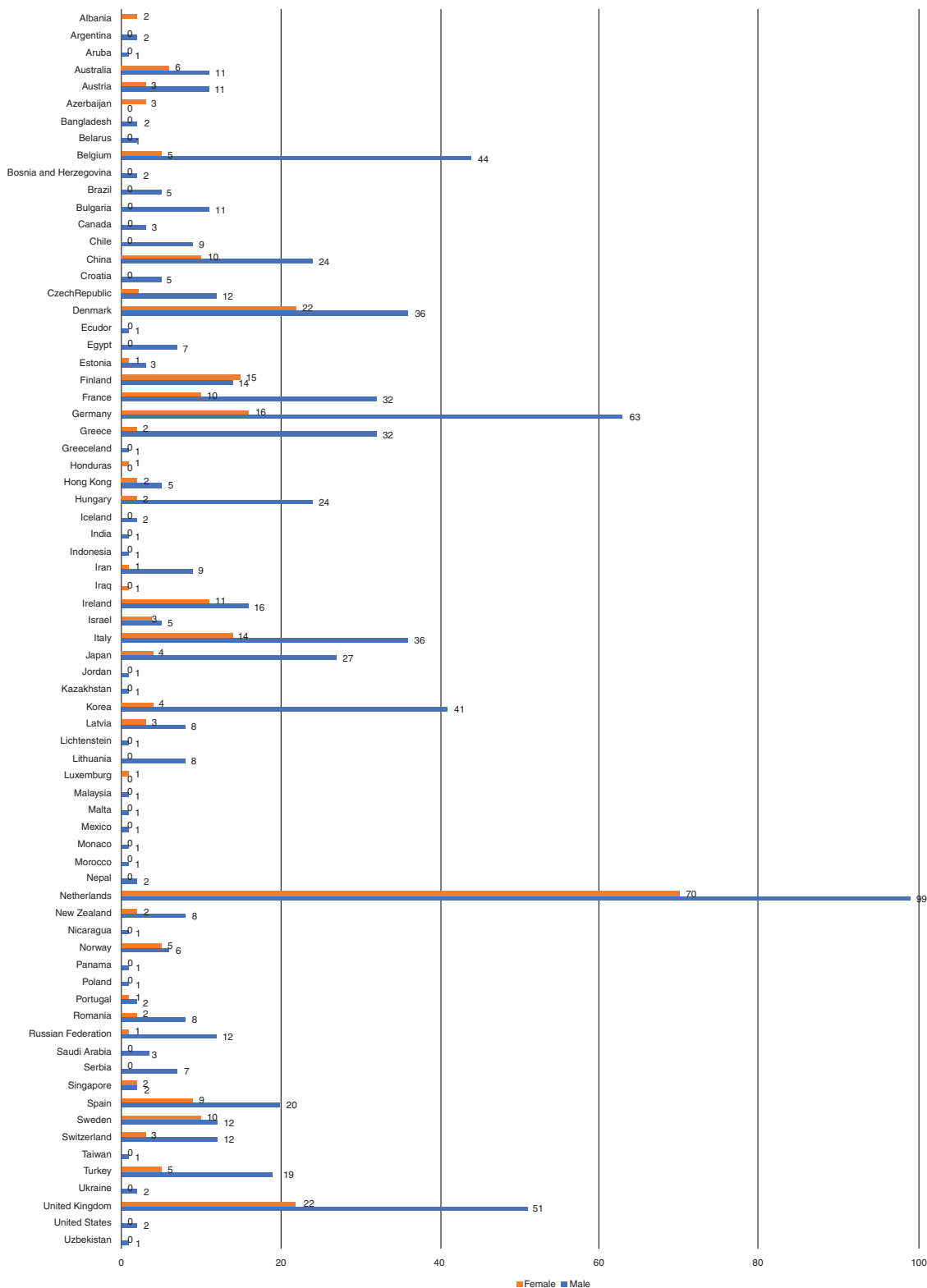


FIGURE 1. Geographic overview distributed by sex and country of origin of the attendees during the annual and scientific ESCP meeting in Berlin, 2017. Orange = female; Blue = male.

chair in the keynote lectures was 16.7% (1/6). The highest proportion as female speaker was in the free papers session 34.9% (22/63), and the lowest was in the industry symposium

session with none of them being women. The representation of men and women as speakers and chairs across different subjects during the 2017 conference is shown in

TABLE 1. Overview of the gender distribution of the members in the different committees in ESCP

Committee	Females	Males	Total
Executive Committee	2	12	14
UEG Representatives	0	2	2
Program Committee	2	12	14
Membership Committee	1	6	7
Corporate Liaison Group	0	8	8
Cohort Studies Committee	0	9	9
Regional Events Working Group	1	7	8
Communications Committee	0	9	9
Guidelines Committee	2	3	5
Education Committee	1	13	14
Research Committee	1	10	11
ESCP Trustees	0	9	9
Total	10	100	110

ESCP = European Society of ColoProctology; UEG = United European Gastroenterology.

Table 3. The only 6 female session chairs were divided over 4 different session subjects: pelvic floor disorders, guidelines, research, and miscellaneous. Women served as chairs for guidelines (1/1) and in the speaker role in the sexual function session (1/1). The rate as speakers was low in trials, proctology, and miscellaneous (9.1%, 10.0%, and 2.9%).

Speaker Introductions

Only the educational and scientific sessions were recorded and uploaded to the ESCP online video archive (27/ 49 sessions), and thus available for analysis. Two further sessions were excluded: a “public and patient debate,” where none of the speakers introduced by the chairs held an advanced degree, and Consultant’s corner, which was introduced by the chair as an informal “edutainment” meeting. The free paper sessions, small hall sessions and industry symposia, fellowships update, Lars Pählman European Board of Surgery Qualification in Coloproctology medal presentation, workshop for authors: how to write a paper, the annual general meeting, and opening and closing ceremonies were not recorded and were excluded from the analysis. Of 91 identifiable speakers, 18 were excluded because the speaker was not properly introduced by name but only by the title of their presentation (7), the introduction of the speaker was not recorded (7), the speaker was not a physician (1), female speaker was introduced as mister (1), or

TABLE 3. Percentage of female speakers and chairs by program topic at the annual ESCP meeting in Berlin, 2017

Categories	Speakers		Chairs	
	Total, n	Female, n (%)	Total, n	Female, n (%)
Research	9	1 (11.1)	4	1 (25)
Proctology	10	1 (10.0)	1	0
Educational	35	4 (11.4)	15	0
Technique	11	3 (27.3)	5	0
Trials	22	2 (9.1)	11	0
Pelvic floor	5	2 (40.0)	3	2 (66.7)
IBD	12	6 (50.0)	9	0
Colon cancer	20	9 (45.0)	9	0
Rectal and anal cancer	17	2 (11.8)	4	0
Guidelines	7	4 (57.1)	1	1 (100)
Miscellaneous	34	1 (2.9)	11	2 (18.2)
Sexual function	1	1 (100)	0	0
QoL	4	3 (75.0)	1	0
Total	187	39 (20.8)	74	6 (8.1)

ESCP = European Society of ColoProctology; QoL = quality of life.

TABLE 4. Formal versus informal speaker introductions by gender

Chair	Gender	Introductions		Total
		Formal, n (%)	Informal, n (%)	
Either	Either	32 (43.8)	41 (56.2)	73
Female	Either	2 (22.2)	7 (77.8)	9 (12.3)
Male	Either	30 (46.9)	34 (53.1)	64 (87.7)
Female	Female	1 (20.0)	4 (80.0)	5
	Male	1 (25.0)	3 (75.0)	4
Male	Female	4 (40.0)	6 (60.0)	10
	Male	26 (48.1)	28 (51.9)	54

the speaker was also the chair of the session (2). Of the 73 introductions evaluated, 43.8% (32/73) were formal and 56.2% (41/73) were informal (Table 4). The group of introductions by gender was too small for statistical analysis to compare differences between male and female chairs.

Survey

A total of 322 members responded to the survey (28% response rate). The majority of respondents were men (63%),

TABLE 2. Program chairs and speakers by gender for the annual ESCP meeting in Berlin, 2017

Categories	Chairs			Speakers		
	Total	Male n (%)	Female n (%)	Total	Male n (%)	Female n (%)
Keynote lectures	6	5 (83.3)	1 (16.7)	6	6 (100)	0 (0)
Specific sessions	29	27 (93.1)	2 (6.9)	65	54 (83.1)	11 (16.9)
Symposia	14	13 (92.9)	1 (6.1)	21	16 (76.2)	5 (23.8)
Surgical video session	3	3 (100)	0 (0)	9	8 (88.9)	1 (11.1)
Free papers	22	20 (90.9)	2 (9.1)	63	41 (65.1)	22 (34.9)
Industrial symposia	0	–	–	23	23 (100)	0 (0)
Total	74	68 (91.9)	6 (8.1)	187	148 (79.1)	39 (20.9)

ESCP = European Society of ColoProctology.

between 31 and 50 years old (60%), and working in an academic, teaching hospital. Of the respondents, 61% were consultants and 16% trainees. Approximately 10% (35/322) of respondents were from countries outside of Europe.

The perceived opportunities to develop one's talent or strengths within the ESCP society identified that of the male responders, 63% felt equally endorsed compared to women, whereas only 33% of the female responders felt equally treated, $p < 0.001$.

Of all female respondents, 72% felt that there are not enough women in the ESCP compared to 49% of male respondents. Despite this disparity, 89% of women and 71% of men considered it of value to the society to engage in achieving a better gender balance. See appendix 2 <http://links.lww.com/DCR/B383> for a detailed overview of the given responses.

The most common reasons attributed to the current gender imbalance and continuing male predominance in colorectal surgery by respondents were: "man's world" (men choose men, "old boys club"), culture/tradition (domestic roles for women and career for men with different levels of support), family and work-life balance (pregnancy, long working hours), difference in characters between men and women, and geography (more gender equality in Scandinavian countries with improved working and social conditions). Time and patience were also a frequently mentioned reason for the current gender imbalance, insinuating that the imbalance will resolve eventually. Another reason deemed responsible was the perceived lack of female role models.

DISCUSSION

There has been increased attention on gender disparity in surgery, and specifically at surgical conferences. An analysis on female representation and gender-based analysis of colorectal surgery conferences was performed in the United States, but no work to date has assessed the gender reality in European colorectal surgery societies or meetings. We sought to evaluate the female representation within the ESCP in 2017. We found differences between the proportion of women as chairs and speakers and as delegates in attendance compared to men at the 2017 annual ESCP meeting, in-depth analysis revealed the degree and areas with most disparity. Women were in the minority regarding their inclusion in the society's committees, overall less than 10% of the committee members were women. Even though female conference attendee rates (26%) are lower than the male rates, they are comparable to the gender distribution within the ESCP as a society.

Some parallels can be seen between the distribution of female faculty members in the program across the different topics and female participation in the committees. An example is the Guideline Committee, which has a much higher percentage of female members (40%, 2/5); their

session had 1 female chair with 4 female speakers with a total of 8 people (1 chair and 7 speakers).

The highest percentage of female chairs was in the category of guidelines and pelvic floor. The highest percentages of female presenters were in sexual function, guidelines, and IBD sessions, and the lowest in trials, research, proctology, and miscellaneous sessions. There are many reasons why there is no equal balance between men and women chairs and speakers. Varying factors in choosing a specific chair or speaker (financial, political, strategic, seniority, level of familiarity, anatomical differences men versus women) could also have influenced the gender differences between the speakers in the different subjects. The lack of female speakers at several industry symposia is noteworthy and conveys a message that requires attention and is subject to change in the coming years.

When comparing data mentioned above with the results at the 2017 ASCRS meeting, differences but also similarities can be highlighted. There are demonstrably more female chairs and committee members within the ASCRS, compared to the ESCP. The geographic distribution shows more gender balance in countries in northwestern countries of Europe in Scandinavia and the Netherlands, which might be comparable to Canada and the United States. Interestingly, and different from the results encountered by ASCRS, no implicit gender bias or increased likelihood of male chairs to introduce female speakers in an informal manner compared to male speakers or vice versa was identified. This might be due to cultural differences where Europeans might be less formal and more informal in their introductions.

The average survey respondent was elderly and male; this is an obvious cross-section of our society, where members and committee members are mostly represented by established male surgeons. Similar demographics were found in an ASCRS survey among their members; the majority of their respondents were male (79%) with a mean age of 51 years.⁹ Most striking results from our survey are that significantly fewer women felt equally endorsed compared to men (33% versus 63%), and that 72% of the women compared to 49% of the men felt that there are not enough women in the ESCP. The perception of unequal treatment and differences in the achieved academic rank as a result of one's gender has been stated before.^{9,10} Our survey also demonstrates that women are missing female role models, and they feel that surgery is an "old boys club" and "a man's world." The fact that most of the respondents of our survey are male could be a sign that there is a willingness to discuss the topic of gender disparity. Could this mean that the subject of gender balance is becoming less taboo and more accepted as a problem that we should address and try to change?

Plan – Do – Check – Act

We believe that the slogan "Women In Surgery - If you can't see it, you can't be it" from the #HowIBecameAWom-

anInSurgery campaign captures one of the major aspects of the gender disparity issue.⁸ The ESCP is striving toward even more inclusiveness and diversity as a European, increasingly global coloproctological society and there are many different areas to address. For this, the first obvious step was to analyze the status quo of gender, which was the intention of this study. After this, the #WomenInSurgery was promoted on all ESCP social media channels in November 2019, thereby sending out a message of awareness to all members that gender balance matters from a societal (fairness) point of view, but also for many reasons is a qualitative medical care topic.

An online survey on parental leave and insight in surgical career development, initiated by an ESCP member, is currently being distributed across the globe in 21 languages. These data will help us understand how to change, to motivate or mentor, to provide guidance with struggles that surgical medical students, trainees, and surgeons face daily. As for the formal scientific program of 2020 in Vilnius: more inclusiveness and increased gender and geographical balance have been named top priorities by our current president and executive committee. A dedicated session for women in surgery with focus on career building, work/life balance, female role models, and mentormenteeship will be planned for the annual meeting in 2020. More detailed data (gender, geographic distribution, and level of training) will be tracked for further and better analysis.

We recognize the limitations to this work. First, the design is retrospective and observational, so we were limited by the sessions recorded, surveys returned, and membership data available for analysis. There is no control in the design, and the distributed survey was not a validated or obligatory questionnaire; therefore, the results may be subject to interpretation error and respondent bias, and they might not be representative for everyone within our society. The number of sessions available for analysis and attendees at the meeting was limited, with no recourse for increasing the sample size, but could be a potential source of bias and power limitation. Another limitation is the fact that the attendees of the 2017 annual ESCP meeting in Berlin is not entirely comparable to an ASCRS Tripartite meeting and could be a potential bias.

Despite any limitations, this is the first analysis done of gender representation in ESCP, and it is important that the results be published to increase awareness and address these disparities going forward.

Although there has been much focus and attention on the topic of gender imbalance, there are still many disparities to overcome. There is no question that gender balance and diversity results in medicine or surgery might lead to a decrease in 30-day mortality, impact patient-doctor relationships, improved productivity, innovation, and employee retention and satisfaction.^{11,12} As a society, we cannot change the character or physical differences be-

tween men and women or the working hour regulations in the hospitals across Europe. What we as a society can do is try to address and change the opportunities for education and engagement in our society and increase ways to create a platform or network for connecting with and inspiring other women.

In conclusion, in reviewing the annual meeting and responses from members, we found the ESCP female representation within ESCP as chair, speaker, attendee, and committee member was much lower than male representation, both in absolute numbers and relative to membership. Greater awareness of this disparity and inclusiveness are aims of ESCP. The impact of these initiatives will be determined by reevaluating these metrics at the 2020 annual ESCP meeting. Above-mentioned projects and plans are an effort to provide an effective platform and network for women to inspire and help each other. Our goals for the future are an awareness that we need a more gender-balanced society, and we should all strive for an increase in women in (colorectal) surgery, more women in the ESCP committees, more women in the formal scientific program, more female role models, and fewer differences in subjective endorsement throughout the sexes. Our intentions and plans to change will be monitored and compared to previous years after the annual meeting in September 2020.

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