THE ANATOLIAN JOURNAL OF CARDIOLOGY

Official journal of the TURKISH SOCIETY OF CARDIOLOGY

Women's Representation in Interventional Cardiology and Other Interventional Fields: Opportunities and Challenges

ABSTRACT

Background: Gender disparities persist in procedure-intensive fields (interventional cardiology (IC), interventional radiology (IR), and interventional gastroenterology (IG)). Despite increasing gender balance in some medical specialties, interventional branches remain male- dominated, potentially limiting women's advancement. This study aimed to identify barriers, opportunities, and the impact of gender-based differences on practicing physicians in IC, IR, and IG in Türkiye, with the goal of informing policy and workplace reforms.

Methods: The authors conducted a cross-sectional survey of 338 physicians (50% female) across 3 procedural specialties. Participants answered a 55-item electronic questionnaire that covering demographics, career satisfaction, professional conditions, and experienced challenges. The complete raw dataset is provided via an online link.

Results: A total of 338 physicians from three procedural specialties responded (50% female overall). Women reported lower incomes, fewer mentorship opportunities, and more frequent workplace discrimination. Whereas men frequently cited "wage suppression" and "long hours" as deterrents, women underscored concerns about radiation exposure, emergency workloads, and gender bias. Although scientific productivity measures (e.g., publications) did not differ by gender, female respondents reported higher rates of emotional harassment and scheduling barriers (taking fewer annual leave days or attending fewer scientific events).

Conclusion: Women's underrepresentation in interventional fields reflects systemic barriers, including perceived or real discrimination, physical demands, and limited structural support. Addressing these barriers, long or unpredictable work hours, radiation concerns, and workplace bias may foster a more inclusive environment. Institutional-level reforms and policy changes are essential to bridging gender gaps and improving retention in these critical specialties.

Keywords: Gender diversity in medicine, female interventional cardiologists, horizontal segregation, vertical segregation

ORIGINAL INVESTIGATION

INTRODUCTION

Gender diversity in medical specialties has improved over recent decades, yet procedure-oriented disciplines such as interventional cardiology (IC), interventional gastroenterology (IG), and interventional radiology (IR) continue to show a stark underrepresentation of women. Currently, women comprise only 7% of interventional cardiologists in the United States, and they perform a smaller percent of total procedures.[1] Historical explanations often reference inflexible schedules, substantial overnight or emergent workload, and lack of female role models or mentors. Furthermore, perceived radiation exposure risks can discourage women from considering or remaining in these subspecialties, particularly during childbearing years.[2,3]

Preliminary indications suggest women's representation remains notably lower in invasive branches compared with non-invasive ones. This study examines demographics, salary disparities, mentorship access, experiences of harassment, and overall satisfaction among a cross-section of Turkish physicians in

Özge Çetinarslan[1]
Şencan Acar[2]
Işıl Yıldız Sönmez[3]
Mehdi Zoghi[4]

[1]*Department of Cardiology, T.C. Demiroğlu Science University, İstanbul Florence Nightingale Hospital, İstanbul, Türkiye*
[2]*Department of Gastroenterology, T.C. Demiroğlu Science University, İstanbul Florence Nightingale Hospital, İstanbul, Türkiye*
[3]*Department of Radiology, University of Acıbadem, Atakent Hospital, İstanbul, Türkiye*
[4]*Department of Cardiology, Ege University Medical Faculty Hospital, İzmir, Türkiye*

Corresponding author:
Özge Çetinarslan
✉ ozgec.arslan@gmail.com

Received: February 13, 2025
Accepted: May 22, 2025
Available Online Date: July 29, 2025

Cite this article as: Çetinarslan Ö, Acar Ş, Yıldız Sönmez I, Zoghi M. Women's representation in interventional cardiology and other interventional fields: Opportunities and challenges. *Anatol J Cardiol.* 2025;XX(X):1-10.

DOI:10.14744/AnatolJCardiol.2025.5249

three interventional fields. By identifying key barriers and opportunities, the authors hope to contribute actionable insights to promote inclusivity and support in these vital disciplines.

METHODS

Between August and December 2024, the authors conducted a web-based cross-sectional survey targeted at specialists in cardiology, gastroenterology, and radiology across multiple Turkish institutions. The corresponding author (in collaboration with local coordinators) disseminated the electronic survey link. Participation was voluntary, and the inclusion criterion was active practice in one of the three interventional branches, with at least two years of clinical experience. Trainees, residents, and medical students were excluded. Ethical approval was obtained. Respondents consented electronically.

We developed a 55-question online survey, addressing:

- *Demographics:* gender, age group, marital status, parental status, and institutional setting.
- *Practice Characteristics:* annual income (categorized), weekly work hours, frequency of night shifts or on-call duty, availability of mentorship, workplace flexibility, and career satisfaction metrics.
- *Barriers and Challenges:* reasons for not performing invasive procedures, perceived harassment or discrimination, wage satisfaction, desire to leave the field, and leading causes of burnout or dissatisfaction.

The survey included items adapted from the Minnesota Satisfaction Questionnaire (MSQ) and Satisfaction With Life Scale (SWLS) to gauge broad career contentment. According to Weiss et al[4] (1967), the MSQ offers a multidimensional approach to job satisfaction, making it applicable across different industries and roles. MSQ total scores are typically interpreted such that a higher score indicates greater job satisfaction. The following ranges are often used: **80-100 points:** high job satisfaction, **60-79 points:** moderate-to-relatively high job satisfaction, **40-59 points:** moderate-to-relatively low job satisfaction, **20–39 points:** low job satisfaction. The SWLS, created by Ed Diener and his colleagues in 1985, was designed to measure individuals' subjective evaluation of their overall life satisfaction.[5] Together, these tools offer a comprehensive framework for evaluating both job satisfaction and life satisfaction, enabling researchers to explore the interplay between professional fulfillment and personal well-being across different demographics and professions. According to 5-point Likert scale across 5 items 5-9: Extremely Dissatisfied, 10-14: Dissatisfied, 15-19: Satisfied, 20-25: Extremely Satisfied. To facilitate ease of reading and traceability, the authors provide an online link to the complete survey responses, including detailed MSQ and SWLS items and results.

Statistical Analysis

All analyses were performed with SPSS Statistics version 26.0. Continuous variables were first assessed for normality with the Shapiro–Wilk test. Variables that followed a Gaussian distribution are presented as mean ± SD. All continuous variables met the assumption of normality; therefore, no medians are reported. Categorical variables are expressed as number and percentage (n, %). Variables demonstrating a normal distribution were analyzed using one-way ANOVA. Associations between categorical variables were examined using the chi-square (χ^2) test or Fisher's exact test when expected cell counts were <5. All tests were 2-tailed, and the level of statistical significance was determined at $P < .05$. The detailed questionnaire and all answers are available in https://tr.surveymonkey.com/results/SM-Wsrw5iNEyXjRHJY2GXH6tg_3D_3D/. No artificial intelligence– assisted technologies were used in the production of submitted work.

RESULTS

A total of 338 physicians from three procedural specialties responded (50% female overall). Below, the authors present demographic distribution, reasons for not selecting an interventional path, workplace challenges, and comparisons of career satisfaction.

Table 1 illustrates a concise demographic breakdown of the cohort: 32.5% (110/338) were in cardiology, 36.9% (125/338) in radiology, and 30.5% (103/338) in gastroenterology.

HIGHLIGHTS

- *Near- Gender Parity, but Persistent Disparities:* Although the survey sample comprises nearly equal numbers of female and male physicians, women still face unique obstacles such as wage suppression, harassment, and fewer mentorship opportunities.
- *Radiation Exposure Remains a Top Concern:* Many female respondents avoid interventional paths due to the perceived risks of radiation, particularly during fertility or childbearing years, highlighting the need for safer protocols and better information.
- *Harassment and Bias Are Widespread*: Emotional and verbal harassment is reported more frequently by women, who also encounter stereotypes (e.g., being mistaken for a nurse), signaling that cultural shifts remain necessary.
- *Similar Academic Output, Unequal Opportunity:* Despite no significant difference in academic productivity, men attend more conferences and earn higher salaries, revealing structural imbalances that undermine women's advancement.
- *Moderate-to-High Job Satisfaction, Low Life Satisfaction:* Minnesota Satisfaction Questionnaire (MSQ) scores place both genders in a moderate job satisfaction range, yet Satisfaction With Life Scale (SWLS) results indicate general dissatisfaction, suggesting that workplace reforms alone are insufficient to address broader well-being concerns.
- *Action Steps:* Transparent pay reviews, equitable parental leave, zero-tolerance harassment policies, and robust mentorship programs are key measures to foster a more inclusive environment for all interventional specialists.

Table 1. Selected Demographics and Practice Characteristics by Specialty

	Cardiology	Radiology	Gastroenterology	*P*
Female, n (%)	52 (47.3%)	73 (58.4%)	45 (43.7%)	= .027
Mean age, years (mean ± SD)	40.1 ± 8.5	37.3 ± 8.2	39.2 ± 9.1	= .190
≥1 Child, n (%)	72 (65.4)	80 (64.0)	69 (66.9)	= .261
Works >45 h/week, n (%)	65 (59.1)	37 (29.1)	52 (50.4)	<.001
Earns <35K USD/year, n (%)	14 (12.7)	21 (16.8)	6 (5.8)	= .040
Takes night shifts, n (%)	84 (76.36)	81 (64.5)	76 (73.7)	= .035
Desire to change workplace, n (%)	51 (46.4)	50 (40.00)	48 (46.60)	= .211

Notably, women formed 58.4% in IR, 47.3% in IC, and 43.7% in IG. Mean age across all respondents was 39.2 ± 8.7 years. Approximately, 67% worked ≥45 h/week, though this proportion was highest among Interventional Cardiologists. There was no statistically significant difference between genders regarding the characteristics of the institutions where physicians worked across all three specialties. When participants were questioned about their professional experience in years (<3 years, 3-5 years, 6-10 years, 11-20 years, >20 years), it was found to be similar across both specialties and genders, with the majority having 11-20 years of experience.

When asked why they had chosen non-procedural roles (i.e., general cardiology, general radiology, and general gastroenterology), Figure 1 shows that women most commonly cited concern about radiation exposure (up to 62% in cardiology) and physically demanding shifts, whereas men were likelier to mention wage suppression or extended training. Some men noted "high professional responsibility" and "emergency workload" as reasons to avoid invasive career tracks.

Table 2 summarizes gender-based annual income by specialities. Income distributions showed women were more likely than men to earn <35K USD/year, significantly.

Figure 2 summarizes gender-based comparison of reasons for desire to change job or field. A larger proportion of women indicated potential job change intentions in the next two years (roughly 40-46% in cardiology and gastroenterology) compared with about 30-35% of men. Wage suppression was indicated as the primary reason for the desire to change jobs or fields for both genders. Subsequently, women

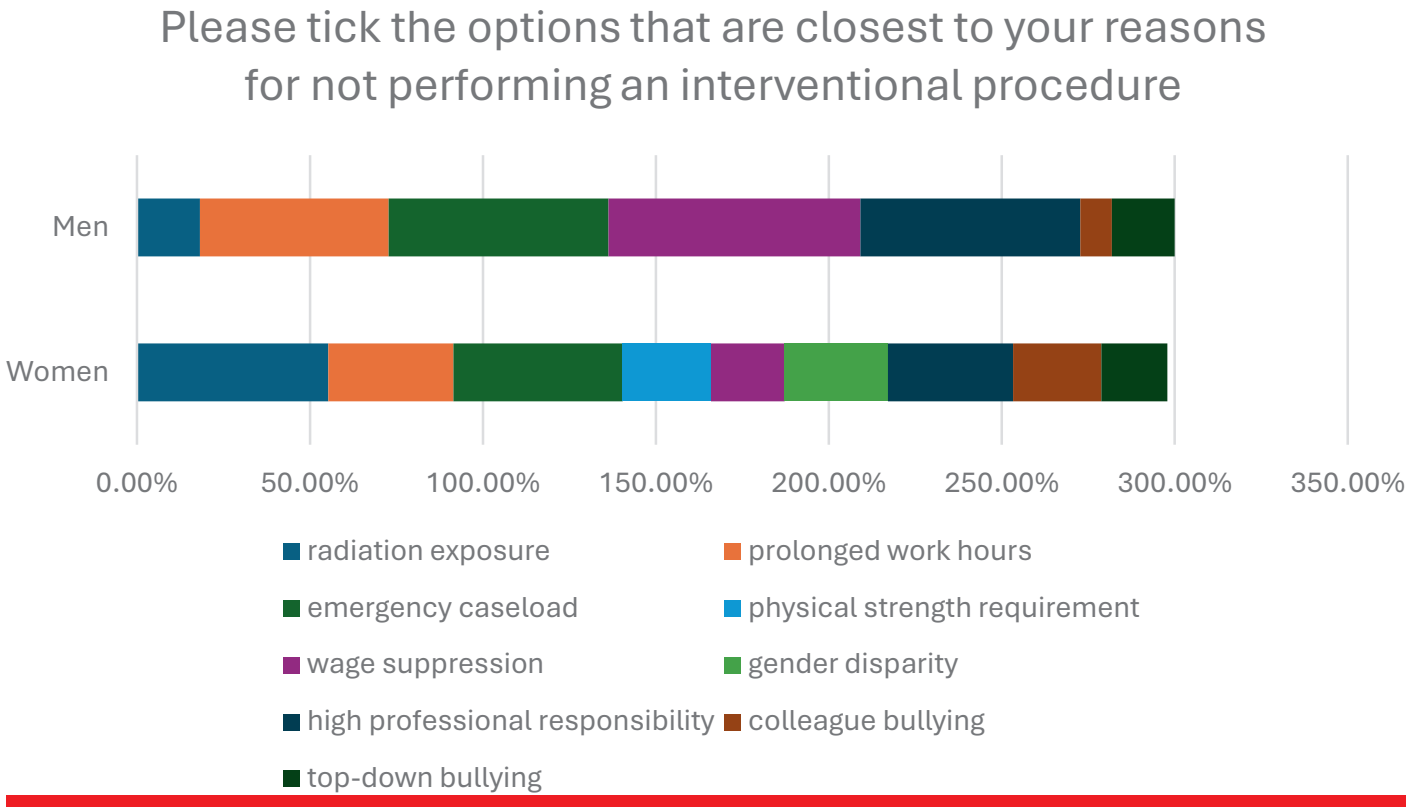

Figure 1. Distribution of reasons for not performing an interventional procedure by gender. Each bar depicts the percentage of men vs. women citing a given reason. Radiation exposure was the leading deterrent for women; wage suppression topped men's reasons.

Table 2. Gender-based Annual Income in Specialities

	<35 000$ n (%)	35 000-69 999$ n (%)	70 000-100 000$ n (%)	>100 000$ n (%)	Total
Cardiology					
Women	10 (19.23%)	33 (63.46%)	6 (11.54%)	3 (5.77%)	52 (47.27%)
Men	4 (6.90%)	36 (62.07%)	13 (22.41%)	5 (8.62%)	58 (52.73%)
P	= .008	= 1.000	= .206	= .720	
Gastroenterology					
Women	6 (13.33%)	31 (68.89%)	5 (11.11%)	3 (6.67%)	45 (43.69%)
Men	0 (0.00%)	31 (53.45%)	18 (31.03%)	9 (15.52%)	58 (56.31%)
P	= .006	= .155	= .018	= .221	
Radiology					
Women	18 (24.66%)	43 (58.90%)	6 (8.22%)	6 (8.22%)	73 (58.40%)
Men	3 (5.77%)	28 (53.85%)	18 (34.62%)	3 (5.77%)	52 (41.60%)
P	= .007	= .588	< .001	= .734	

in each specialty consistently cited higher rates of colleaque bullying, top-down harassment, and gender inequality in career advancement than did men ($P < .05$), whereas men more frequently pointed high professional responsibility. Many respondents who reported discrimination or harassment stated that they also took fewer annual-leave days (because they feared negative judgments) and had less schedule flexibility.

Table 3 presents gender-based comparison of some key variables. No gender differences were observed in the exposure to physical and verbal violence among specialities. Radiation exposure affects women's career choices more significantly; however, no statistical difference is observed in cardiology (50.00% vs. 34.48%, $P > .05$). During their careers, 85.88% of female participants, 72.62% of male participants have never held administrative roles ($P < .05$). In the overall group, the authors see that women are more frequently childless, whereas men more often have children. The authors also note that this significant difference primarily stems from the variation observed in cardiology. Unlike to the other two branches, in cardiology, 46.15% of female cardiologists and 24.14% of male cardiologists do not have children (46.15% vs. 24.14%, $P < .05$). The proportion of male cardiologists with 2 or 3 children is

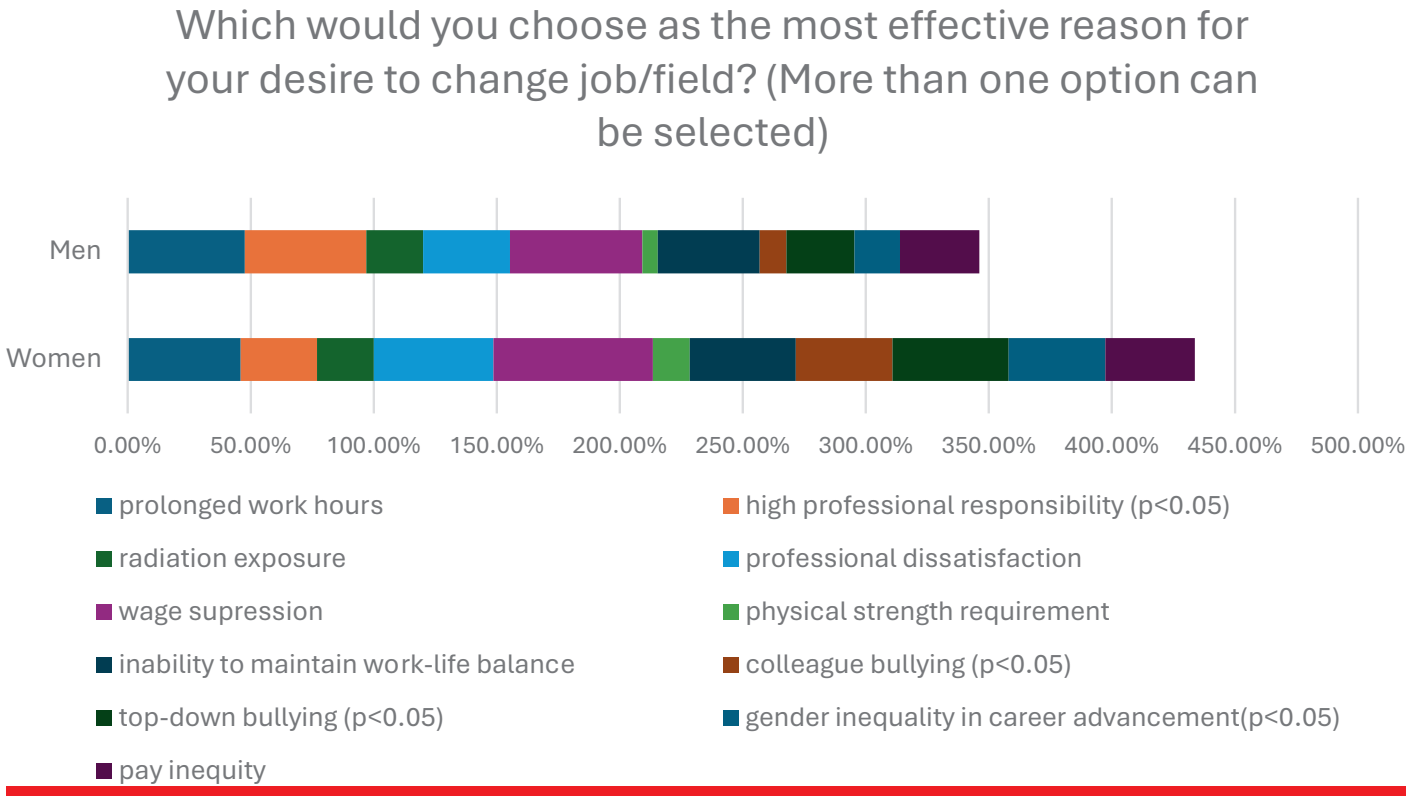

Figure 2. Gender-based comparison of reasons for desire to change job/field. P < .05 is significant.

Table 3. Gender-based Comparison of Some Occupational Variables

	Female, n (%)	Male, n (%)	*P*
Physical violence	18 (10.59)	32 (19.05)	= .032
Verbal violance	158 (92.94)	145 (86.31)	= .049
Impact of radiation exposure on career decision	75 (44.12)	39 (23.21)	< .001
No administrative role during career	146 (85.88)	122 (72.62)	= .003
No child	73 (42.94)	44 (26.19)	= .001
2 or 3 children	52 (30.59)	88 (52.38)	< .001
No inactive period	108 (63.53)	149 (88.69)	< .001
>1 years inactive period	62 (35.88	19 (9.52)	< .001
Female mentorship access	36 (21.18)	13 (7.74)	= .001
35-55 hours working per week	138 (81.18)	126 (75.00)	= .191
>55 hours working per week	14 (8.24)	35 (20.83)	= .001
<10 days annual leave	11 (6.47)	18 (10.71)	= .211
10-19 days annual leave	80 (47.06)	61 (37.31)	= .048
20-29 days annual leave	59 (34.71)	63 (37.5)	= .242
No national scientific meeting attandence	49 (28.82)	28 (16.67)	= .009
No international scientific meeting attandence	106 (62.35)	86 (51.19)	= .048
National publications	89 (52.36)	103 (61.31)	= .111
International publications	87 (51.18)	106 (63.09)	= .080

significantly higher than that of female cardiologists (41.38% vs. 17.31%, $P < .05$; 8.93% vs. 3.53%, $P < .05$). The proportion of women who have had a career break exceeding 1 year is significantly higher than that of men. Mentorship access varied: 21% of female interventionalists vs. 7% of male interventionalists reported no available same-gender mentor. When looking at weekly working hours, there is no gender difference for those working 35 to 55 hours per week, whereas the proportion of men working more than 55 h/week is higher than that of women. Meanwhile, across specialties, men reported slightly better job flexibility (though differences reached significance mostly in cardiology). When examining the monthly on-call and standby shifts, there is no gender difference among those with fewer than 10 shifts. However, the proportion of men taking more than 10 shifts per month is significantly higher than that of women (11.76% vs. 19.64%, $P < .05$). Although there is no significant difference in the number of national and international publications, the authors observe that the proportion of women who did not attend scientific congresses is significantly higher than that of men.

With an MSQ score of 64.9 for female participants and 68.42 for males, both falling within the 60-79 moderate-to-high job satisfaction range and SWLS values indicating "dissatisfied" status for both women (14.45) and men (14.8), it appears men's scores are higher but do not place them in a distinctly different satisfaction category.

Figure 3 presents questions that apply exclusively to female participants, addressing topics such as whether they have ever been mistaken for a nurse, had their marital status questioned during hiring, or felt they needed to work harder to prove their competence because of being a woman. By contrast, Figure 4 features questions posed only to male participants, including whether they have ever been mistaken for a nurse, whether a patient hesitated to choose them simply for being male, or if they perceived any gender-based barriers in their own career advancement. In essence, Figure 3 captures gender-specific experiences from a female perspective, such as being labeled "Doctor Sir" or facing skepticism about procedural skills, whereas Figure 4 shows parallel issues from a male standpoint, including the possibility of patient hesitation linked to the physician's gender.

DISCUSSION

This survey highlights persistent gender disparities within Türkiye's IC, IG, and IR workforce. Although nearly half of the our respondents were women, their representation differed by specialty. Recent data from professional associations in Türkiye reveals stark gender imbalances. Of 3046 registered members in cardiology, 663 are women (21.77%), of 821 members in gastroenterology, 226 are women (27.53%), and among 4525 members in radiology, only 1615 (35%) are women. The existing literature highlights ongoing challenges related to gender distribution within the medical profession across different countries and specialties.[6-14] By contrast, our survey found near-equal numbers of women and men currently practicing in interventional roles. This near parity strengthens the representativeness of our relatively small sample. Furthermore, this survey constitutes the first detailed examination in Türkiye that captures both female and male perspectives on women's limited representation in interventional fields, offering a more nuanced insight into the challenges and opportunities inherent to gender diversity in these specialties. Nevertheless, women across all three specialties reported more workplace strain, less mentorship, and lower salaries than men.

Figure 3. Questions about career-related experience for female participants only.

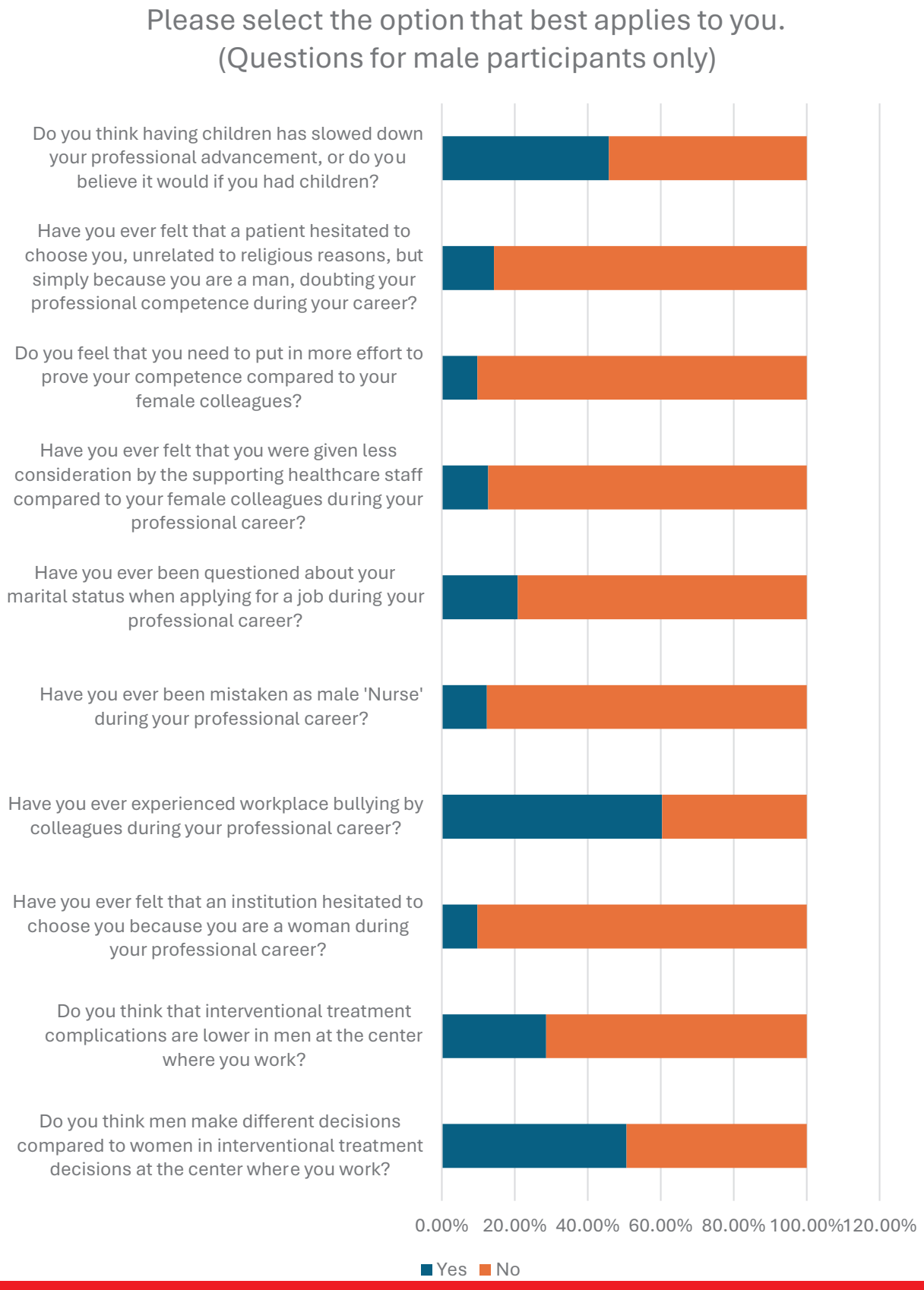

Figure 4. Questions about career-related experience for male participants only.

Our data reveal that radiation exposure remains a major concern for women. Although modern protective measures and robotic or remote-controlled procedural techniques can reduce exposure risks, perceptions of potential harm, particularly related to fertility or childbearing, still persist. The physical demands of wearing lead for extended hours or responding to frequent emergent calls also make the specialty less appealing, and many women who avoid interventional tracks cite these factors as decisive reasons. To address these concerns, widespread dissemination of accurate, evidence-based information is critical. In addition, institutions should promote and enforce guidelines that minimize fetal and maternal risk, by using advanced or lighter shielding, employing remote-control robotic systems where possible and offering flexible reassignment options for pregnant physicians. Additionally, to prevent pregnancy and motherhood from causing prolonged career breaks, leave policies should be structured so that men also share these responsibilities at a level comparable to women. Because the authors' survey presents that 35.87% of women return to their careers at a lower position after maternity leave. Many physicians' partners also work full-time; structured support (childcare services, flexible practice models) can ease logistical burdens.

Simultaneously, men described "wage suppression," "high professional responsibility," and "extended training pathways" as concerns. Although these issues are not unique to men, it may be that men interpret or experience institutional compensation practices or role expectations differently. The cultural norms around bread-winning responsibilities could influence men's emphasis on wages. On the other hand, while women are assumed to be financially supported by male counterparts, leading to a perception that women only need to work enough to support themselves. This societal bias contributes to the overestimation of men's efforts and the underestimation of women's performance, further exacerbating gender inequality in the workplace. Particularly in patriarchal societies, women may perceive expressing fatigue as a sign of weakness. Much like a "Cinderella" waiting for external intervention, they may believe that the intensity of their workload will only decrease, or they will be granted rest when they have "earned" it or when others deem it appropriate.[15]

Various studies conducted in the United States have revealed that women often feel unwelcome in medical school environments and are not regarded as equal members of scientific communities.[16] This lack of inclusion can increase their emotional burden, anxiety, workload, and pressure to be perfect, ultimately affecting their clinical experience. The authors' findings demonstrate that female specialists remain overrepresented in the lowest pay categories, even after accounting for differences in years of experience or hours worked. Periodic review of salaries, adjusted for experience and productivity, can mitigate wage gaps. Publicizing these findings holds departments accountable and reassures female physicians that compensation decisions are fair. Addressing this income gap is essential not only to foster gender equality but also to ensure that all physicians feel valued and fairly compensated for their contributions.

One of the survey findings that illustrates how long it takes for female doctors in these specialties to prove themselves, due to societal perceptions of the profession, is that almost all women in all three fields reported being mistaken for a nurse at least once during their careers. In contrast, this experience was reported by only a very small number of male doctors. The fact that more than half of female doctors have been subjected to comments or questions implying menstruation, such as "Are you feeling tense today?" or "Is it that time of the month?" during their careers is clear evidence that even highly educated male colleagues in these workplaces, who are supposed to have a higher intellectual capacity than the general population, struggle to fully accept the presence of women in these environments.

Despite the Royal College of Physicians' definition of the "feminization of medicine," horizontal and vertical segregation remains a critical concern.[17] Horizontal segregation refers to women being concentrated in specific areas of medicine, particularly in lower-income fields with worse working conditions and fewer opportunities for advancement. Vertical segregation refers to the tendency of women, compared to men, to remain in lower-level positions throughout their careers, with many retiring at those levels. A study published in 2020 highlights that women in medicine tend to be concentrated in lower-income fields with limited opportunities for career advancement, whereas men are more likely to pursue prestigious and higher-paying specialties.[18] As Simone de Beauvoir argued in The Second Sex, societal structures historically relegated women to secondary roles, both in the domestic sphere and the workforce. While advancements in education and professional opportunities have enabled women to break free from some of these constraints, many barriers persist, particularly in high-stakes, male-dominated fields like interventional medicine.

According to the survey, it is important to note that men are also aware that women need to put in more effort to prove their professional competence. This awareness is crucial, as gender discrimination can only be effectively corrected when it becomes a shared concern for both men and women. Male physicians are still favored over female physicians—even in many Muslim-majority countries. Perhaps, the authors are dealing with a system in which women must first 'prove themselves like men' before being acknowledged as physicians. Nonetheless, the combination of wage gaps, harassment, and limited mentorship can result in lower morale and higher turnover intentions among women. A zero-tolerance harassment policy is warrented. Clear and enforceable guidelines, coupled with confidential reporting channels, signal institutional commitment to workplace respect. Ongoing staff education can help dismantle the "old boys' club" ethos.

Despite these challenges, no significant differences emerged in reported academic productivity rates. There should be a mandatory requirement to sponsor women and men equally for scientific meetings or events. Given that there is no significant difference in academic productivity or working hours, yet men appear to participate more

in scientific activities. This demonstrates that there is no rational basis for such a discrepancy. Systemic barriers and workplace culture issues likely drive the continued inequality in representation. Encouraging women's involvement in committees, educational roles, and departmental governance fosters visibility. A critical mass of female role models can shift entrenched cultural biases. Mentorship can buffer against stressors, help junior faculty navigate promotion, and potentially reduce feelings of isolation or burnout. Our data show fewer opportunities for women to find same-gender mentors, especially in the interventional branches, possibly due to fewer senior female pioneers in these fields. Although cross-gender mentorship can also be effective, some participants expressed comfort in having a mentor who shares their gender-related experiences. Enhanced formal mentorship programs, especially focusing on the unique needs of female interventionalists (e.g., safer radiation protocols, flexible scheduling, and transparent leadership pathways), may thus improve retention and career satisfaction.

The relatively low SWLS scores highlight the importance of interventions beyond clinical tasks. Initiatives to bolster overall life satisfaction, through well-being seminars, mental health resources, and schedule modifications, may improve both personal and professional fulfilment. Although men's job satisfaction and life satisfaction scores are relatively higher than women's, neither group attains a level indicative of high satisfaction. Systematic monitoring of these metrics before and after new policies or technologies are introduced will be essential to identify which interventions genuinely benefit all interventional physicians.

Study Limitations

The study have several limitations. First, the study sample is relatively small compared to the total possible interventional workforce in Türkiye, limiting generalizability. Second, it could have been beneficial to provide whether the participants received psychological support. Third, potential departmental nuances and unmeasured institutional variables may influence results. Finally, it may be extended to surgical branches. Nonetheless, the findings provide an exploratory window into current realities, meriting future larger-scale, possibly longitudinal studies.

CONCLUSION

Despite near-equal representation of women and men in our sample, structural barriers remain deeply rooted in IC, radiology, and gastroenterology. Both genders report moderate job satisfaction (MSQ) and overall dissatisfaction with life (SWLS), suggesting that workplace reform alone may not resolve broader well-being issues. Women in particular face heightened concerns, radiation exposure fears, fewer mentorship opportunities, and wage disparities that contribute to higher turnover intentions. Meanwhile, men contend with pressures such as wage suppression and traditional breadwinner expectations. Together, these findings underscore the need for streamlined policies, transparent pay reviews, equally shared parental leaves, robust harassment reporting channels, and expanded mentorship to promote a truly inclusive environment, where professional success depends on skill rather than gender.

Ethics Committee Approval: T.C. Demiroğlu Science University Ethical Committee Approval Number: 28.08.2024/2024.02.02.

Informed Consent: Written informed consent was obtained from the patients who agreed to take part in the study.

Peer-review: Externally peer reviewed.

Acknowledgment: The authors gratefully acknowledge Prof. Dr. Çavlan Çiftçi for securing the necessary institutional approvals and providing steadfast support that made this investigation into women's representation and the challenges they encounter in interventional specialties possible.

Author Contributions: Concept – Ö.Ç., Ş.A., I.Y., M.Z.; Design – Ö.Ç, Ş.A., I.Y., M.Z.; Supervision – Ö.Ç., Ş.A., I.Y., M.Z.; Resources – Ö.Ç.; Materials – Ö.Ç.; Data Collection and/or Processing – Ö.Ç.; Analysis and/or Interpretation – Ö.Ç.; Literature Search – Ö.Ç.; Writing – Ö.Ç.; Critical Review – Ö.Ç., Ş.A., I.Y., M.Z.

Declaration of Interests: The authors have no conflicts of interest to declare.

Funding: The authors declare that this study received no financial support.

REFERENCES

1. Yong CM, Abnousi F, Rzeszut A4142K, Douglas PS, Harrington RA, Mehran R, et al. American College of Cardiology Women in Cardiology Leadership Council (ACC WIC); Society for Cardiovascular Angiography and Interventions Women in Innovations (SCAI WIN). Sex Differences in the Pursuit of Interventional Cardiology as a Subspecialty Among Cardiovascular Fellows-in-Training. *JACC Cardiovasc Interv*. 2019;12(3):219-228. [CrossRef]. Epub 2019 Jan 16. Erratum in: *JACC Cardiovasc Interv*. 2019;12(7):695. (https://doi.org/10.1016/j.jcin.2019.03.008)
2. Gualano SK, Henderson J, Menees S, Kerkar A, Parisi E, Kerr EA. Women's representation in interventional cardiology. *JAMA Cardiol*. 2024;9(9):859-861. [CrossRef]
3. Sharma G, Douglas PS, Hayes SN, et al. Global prevalence and impact of hostility, discrimination, and harassment in the cardiology workplace. *J Am Coll Cardiol*. 2021;77(19):2398-2409. [CrossRef]
4. Weiss DJ, Dawis RV, England GW, Lofquist LH. *Manual for the Minnesota Satisfaction Questionnaire*. University of Minnesota, Industrial Relations Center; 1967.
5. Diener E, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. *J Pers Assess*. 1985;49(1):71-75. [CrossRef]
6. Brundtland GH. The woman physician in the year 2000. *J Am Med Women Assoc*. 2000;51(1):3-19.
7. de Koninck M, Bergeron P, Bourbonnais R. Women physicians in Quebec. *Soc Sci Med*. 1997;44(12):1825-1832. [CrossRef]
8. Gjerberg E. Medical women -- towards full integration? An analysis of the specialty choices made by two cohorts of Norwegian doctors. *Soc Sci Med*. 2001;52(3):331-343. [CrossRef]
9. Hojat M, Gonnella JS, Erdmann JB, et al. Physicians' perceptions of the changing health care system: comparisons by gender and specialties. *J Community Health*. 2000;25(6):455-471. [CrossRef]
10. Heiligers PJM, Hingstman L. Career preferences and the work-family balance in medicine: gender differences among medical specialists. *Soc Sci Med*. 2000;50(9):1235-1246. [CrossRef]

11. Riska E. Towards gender balance: but will women physicians have an impact on medicine? *Soc Sci Med*. 2001;52(2):179-187. [CrossRef]
12. Williams PA. Changing the palace guard: analysing the impact of women's entry into medicine. *Gend Work Organ*. 1999;6(2):106-121. [CrossRef]
13. Zimmerman MK, Hill SA. Reforming gendered health care: an assessment of change. *Int J Health Serv*. 2000;30(4):771-795. [CrossRef]
14. Department of Health. *Hospital, Public Health Medicine and Community Health Services Medical and Dental Staff in England: 1993–2003*. London: HMSO; 2004.
15. Dowling C. *The Cinderella Complex : Women's Hidden Fear of Independence*. New York :Summit Books; 1981.
16. Foster SW, McMurray JE, Linzer M, Leavitt JW, Rosenberg M, Carnes M. Results of a gender climate and work environment survey at a midwestern academic health center. *Acad Med*. 2000;75(6):653-660. [CrossRef]
17. Laurance J. The medical timebomb: too many women doctors. *Independent*. 2004.
18. Hustad IB, Bandholtz J, Herlitz A, Dekhtyar S. Occupational attributes and occupational gender segregation in Sweden: does it change over time? *Front Psychol*. 2020;11:554. [CrossRef]