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Networking practices and gender inequities in academic medicine: Women's and men's perspectives

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Summary

Background Studies of gender inequities in academic medicine suggest the negative impact of men's networking practices, but little is known about how they shape faculty experiences.

Methods In this qualitative study, in-depth, semi-structured interviews were conducted with 52 women and 52 men academic medicine faculty members at 16 institutions across the US in 2019. Interviews explored participants' experiences and perceptions of gender inequities in academic medicine, including perceptions of men's networking practices. Interviews were recorded and transcribed verbatim, and transcripts were analyzed using a mixture of deductively and inductively generated codes.

Findings Qualitative analysis of interview transcripts identified different dominant themes: (1) Women were often excluded from networking activities dominated by men, (2) Both women and men referred to men's networking practices in academic medicine, and believed they conferred benefits to members and excluded non-members from such benefits, (3) Participation in such networking activities yielded professional advantages, (4) Women made efforts to counteract their exclusion yet identified limits of those efforts.

Interpretation The data suggests that gender inequities in academic medicine might be associated with professional interactions that occur outside of the scope of professional work practices and in formal work sites. Additional research is needed to better understand practices such as informal networking activities and their impact in order to promote gender equity.

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Introduction

Numerous studies demonstrate disparities between women's and men's professional outcomes in academic medicine – such as compensation, prizes and awards, career advancement, and research support – that cannot be explained by specialty, research productivity, age, or experience.^{1–5} Women face barriers in academic medicine that men do not, such as gender bias, and workplace policies that do not accommodate pregnancy and caring for children.^{6,7} Despite recognition of these disparities and barriers, and the implementation of policies designed to increase gender equity, gender inequities in academic medicine have persisted, and our understanding of the factors contributing to this persistence remains limited.⁸

One potential contributor to gender inequities that we know relatively little about is professional networking activities, and the consequences thereof. Networking activities, and the relationships they facilitate, are an

essential ingredient in career success in many industries, including academic medicine.^{9–11} Networking practices are also recognized as contributors to the perpetuation of gender inequities in organizations.¹² Networking activities yield material professional benefits to participants, and disadvantage those who do not participate.¹³ Women experience barriers to networking which men do not, due in part to time constraints resulting from a disproportionate share of family responsibilities, and because they may be excluded – intentionally or unintentionally – from informal professional activities that historically have been dominated by men.^{9,10}

Men's networking activities are considered key features of and contributors to “boys' club” culture.¹⁴ Such activities include participation in conferences, social events, viewing of sporting events, hunting expeditions, visits to strip clubs, drinking at the bar, and participation in sports, especially golf.^{9,13,14} Scholars argue that when men regularly engage in boys' club practices such as these, there may be multiple, systemic barriers to women's advancement within a profession - even in conjunction with formal policies that officially prohibit

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Research in context

Evidence before this study

Before undertaking this study, the authors reviewed publications in the peer-reviewed literature that addressed networking practices and the formation of professional relationships that influenced career advancement, with a focus on academic medicine. Search terms included academic medicine, networking, professional relationships, and boys club. The time frame of the literature search was not limited (all published literature until present). The literature search was limited to published articles. Search terms included “networking”, “professional networks”, “boys’ club”, “gender” and “academic medicine.”

Added value of this study

This qualitative study utilized in-depth, semi-structured interviews to examine 52 women and 52 men faculty members’ experiences and perceptions of gender inequities in academic medicine. This allowed for new insights into practices outside of formal work processes that may create or maintain gender inequities in academic medicine and in doing so contribute to disparities in concrete, professional outcomes.

Implications of all of the available evidence

Our findings suggest that informal networking practices are common in academic medicine and yield professional benefits to those who participate. These findings might have implications for the study of gender inequities in academic medicine, and for policies designed to promote gender equity.

discrimination based on gender.¹⁴ Studies of participants’ experiences of academic medicine find that women and men sometimes describe it as a “boys’ club” or “old boys’ club” with profound – albeit poorly defined – implications for gender inequities in this professional realm.^{15–19} Thus, examining what boys’ club practices entail, and how they may facilitate the accretion of professional advantages and disadvantages is an important component of studying the production of gender inequities in academic medicine.

The data we report here are drawn from a larger, qualitative study designed to examine women’s and men’s understandings of multiple dimensions of gender inequities in academic medicine. Here we describe women’s and men’s perceptions of men’s networking practices, and how they can contribute to a boys’ club in academic medicine. We examine participants’ understandings of the benefits of boys’ club membership, and how these benefits may translate into concrete professional advantages which may contribute to gender inequities in academic medicine.

Methods

Study design and data collection

The data reported in this article are drawn from a parent study which utilized qualitative, semi-structured interviews to examine women’s and men’s understandings of multiple dimensions of gender inequities in academic medicine.^{20,21} The study was informed by social constructionist or constructivist traditions, which consider the examination of participants’ understandings of their own experiences an important element of studying social phenomena.^{22,23} We employ a social constructionist approach to gender, which holds that differences between women and men are a product of social interactions, rather than a reflection of innate, biological differences.^{24,25}

Drawing upon the senior author’s (JG) years of participating in academic medicine as a woman surgeon and other authors’ (MM, DD) familiarity with the literature on gender inequities and academic medicine, we developed a semi-structured interview guide. Our open-ended questions were intended to elicit interviewees’ experiences and perceptions of the ways in which gender shapes experiences of working in academic medicine, and the ways institutions respond to gender inequities. The senior author conducted three pilot interviews to test and refine the interview guide [Table 1](#). [Table 1](#) presents an overview of interview questions used in the study.

The senior author interviewed 52 women and 52 men academic medicine faculty members at 16 institutions across the US. We used a purposive sampling strategy to recruit institutions which were diverse in terms of location and ownership (public/private). The senior author sent emails to potential participants which included a description of the study and a request for an interview. We used purposive and snowball sampling to recruit roughly equal numbers of women and men participants within each institution, and to seek participants who were diverse in terms of degree type (MD, PhD, MD/PhD), career stage/rank, and age. Interviewees were drawn from both clinical science and basic science departments. Clinical departments represented included surgery and surgical sub-specialties, medicine, pathology, neurology, pediatrics, psychiatry, ob-gyn, radiation oncology, and dermatology. We developed our sample size a priori by referring to the concept of data adequacy. This allowed us to undertake the necessary field site selection, participant sampling, and data collection required given our complex design. It was not feasible nor reasonable to end data collection after achieving saturation in this type of multi-site study.²⁶ Although we do not claim that our sample is statistically representative of any particular population, our sampling strategy ensured the recruitment of participants with diverse experiences and perspectives.

Participants were assured of confidentiality in respect to their identity and their institution; when

interviewees were recruited through snowball sampling, the interviewer did not disclose the source of the referral. Interviews were conducted in 2019, and were conducted in person in a private location of the interviewee's choice (most often their office), with the exception of 2 which were held via Zoom. Each interview lasted approximately one hour, and all were digitally recorded and professionally transcribed verbatim. The study was approved by a University of California, San Francisco Institutional Review Board (IRB), and all participants provided oral informed consent, which was recorded. We report our study using the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines (supplemental data).

Analysis

We entered the interview transcripts into ATLAS.ti Scientific Software Development GmbH, version 8 for qualitative data analysis. We (MM, JG, DD) developed an a priori set of codes that corresponded with our interview questions. Codes such as “experiences of gender

inequities” and “awareness of gender inequities,” were created in this manner, while other codes were generated inductively. A key strength of in-depth, semi-structured interviews which contain open-ended questions is that they allow new themes to emerge from participants' responses to interview questions, and for interviewers ask unscripted follow-up questions. Such was the case with our participants' mentions of professional networking and the boys' club. Their statements about these topics emerged in response to questions in our interview guide (see Table 1) such as, “How do people come to occupy leadership positions at your institution?” Because these themes became evident in our reading and discussion of the first 10 interview transcripts, i.e., they emerged from the data, the codes “networking/professional relationships” and “boys' club” were inductively created.

After developing a codebook, we read 10 more interviews and coded them individually, then discussed our interpretations of the data and applications of codes as a group. We considered the differences in our understandings, and made adjustments to the criteria for

Question category:	Questions:	Possible probes:
Background questions	<ul style="list-style-type: none"> • What is your current position? • What are your current professional responsibilities? • How did you get to your current position? 	
Professional history	Please tell me about your. . . <ul style="list-style-type: none"> • Training • Experiences of obtaining first faculty position • Going up for promotion/tenure • Negotiating for resources • Seeking or occupying leadership positions • Experiences balancing work and family (or other priorities) 	Tell me about your. . . <ul style="list-style-type: none"> • Positive experiences • Negative experiences
Academic medicine	<ul style="list-style-type: none"> • There is a widespread belief that academic medicine functions as a meritocracy. In your experience, how does that meritocracy function? • Have you ever experienced or observed a situation in which the person who was most qualified for a position did not get the job? • Have you ever been a part of or observed a situation in which important resources were not distributed equitably, such as start-up funds, lab space, etc.? • Do you know how decisions are made at your institution? • How do people come to occupy leadership positions at your institution? 	Ask for details.
Gender inequities	<ul style="list-style-type: none"> • How has your gender played a role of your experience in academic medicine? • Have you experienced challenges or difficulties in your career that you think might be associated with or attributable to your gender? • Have you ever seen or heard of a colleague experiencing challenges or difficulties in academic medicine that could have been related to their gender? • Have you seen or heard of a colleague experiencing advantages in academic medicine that could have been related to their gender? • Why do you think we continue to have a “leaky pipeline” in academic medicine? (What are your impressions of the reasons why women leave academic medicine at higher rates than men?) • How does your institution respond to gender inequities, broadly defined? 	Ask for details.

Table 1: Interview questions.

applying codes. These practices are situated within the constant comparative approach to qualitative data analysis.²⁷ After individually coding another ten interviews and comparing our application of codes, we found we had achieved intercoder agreement as defined by Campbell et al.²⁸ Intercoder agreement, according to Campbell et al., means that coders are able to reconcile through discussion whatever coding discrepancies they may have for the same unit of text (i.e., segment of an interview transcript).²⁸ This achievement allows for refinement of the inclusion and exclusion criteria of codes, and thus the consistent application of codes by different coders. Two members of the study team (MM, JG) applied a subset of codes to each of the interviews. Throughout this process, we kept reflective memos on the application of codes, and discussed our coding efforts regularly, in keeping with standard practices for qualitative data analysis.²⁹ Data analysis was performed in two stages, from March to June 2020, and from April to June 2021.

This article is based upon segments of interview transcript which were coded as “networking/professional relationships” and/or “boys’ club.” The “networking/professional relationships” code captured the ways in which participants engaged with colleagues, the benefits they derived from professional relationships, the advantages of knowing certain people, and explicit references to networking or engaging with colleagues outside of work settings, e.g., golfing, socializing at conferences, and get-togethers at colleagues’ homes. The “boys’ club” code was applied to interviewees’ mentions of a “boys’ club” or a “good ole’ boys” club.

Role of the funding source

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funder has no role in study design, data analysis or decision to submit the manuscript. All authors had full access to all the data in the study and had final responsibility for the decision to submit for publication.

Results

Fifty-two women and 52 men were interviewed for this study. Fifty-six women and 58 men were invited to participate; 4 women and 6 men declined, citing scheduling conflicts [Table 2](#). displays information about the study participants. Women participants’ median age (interquartile range [IQR]) was 53 (45–63) years. Men participants’ median age (IQR) was 59 (51–65) years. Eighteen (35%) of the women participants held an MD degree, 4 (8%) held an MD and a PhD, and 30 (58%) held a PhD). Twenty-six of the men we interviewed (50%) held an MD, 10 (19%) held an MD and PhD, and 16 (31%) held a PhD. Fourteen (27%) of the women were assistant professors, 8 (15%) were associate professors, and 30 (58%) were full professors at the time of their interview. Seven (14%) of the men were assistant professors, 8 (15%) were associate professors, and 37 (71%) were full professors when they were interviewed. Twenty-three (44%) of the women held leadership positions, and 15 (29%) of the women held endowed chairs. Thirty-seven (71%) of the men held leadership positions, and 30 (58%) of the men held endowed chairs.

In this article we report five dominant themes within our data on networking and the boys’ club, which are listed in [Table 3](#) with representative quotes.

Theme 1: the exclusion of women from networking activities dominated by men

Many of our participants recognized that men regularly engaged in networking activities or informal

Characteristic	Women Respondents N (%)	Men Respondents N (%)	Total Respondents N (%)
Gender	52 (50)	52 (50)	104 (100)
Age: median (IQR) ¹	53 (45–62)	59 (51–65)	56 (48–63)
Degree			
MD	18 (35)	26 (50)	44 (42)
MD and PhD	4 (8)	10 (19)	14 (14)
PhD	30 (58)	16 (31)	46 (44)
Professor Rank			
Assistant	14 (27)	7 (14)	21 (20)
Associate	8 (15)	8 (15)	16 (15)
Full	30 (58)	37 (71)	67 (64)
Leadership Position	23 (4)	36 (69)	59 (57)
Endowed Chair	15 (29)	30 (58)	45 (43)

Table 2: Study participants’ age, degree type, and career status.

¹ Interquartile range.

Theme 1: Recognition of a boys' club and its implications	
Subthemes	Illustrative quotes
Even if the "boys' club" cannot be defined, it exists and has distinct implications	<p>"I do not think the boys' club is something you can define, but you can feel the camaraderie. The men just laugh with the other men in leadership. It's collegiality and respect for members of the club, and privileges come with that, and those same privileges do not extend to the other gender." – Participant 89 (man)</p> <p>"It's a good ole' boy system. He knows the good ole' boy, the good ole' boy knows the good ole' boy. I cannot explain it. It really makes no sense." – Participant 86 (woman)</p> <p>"Radiology has a terrible shortage of women. I think it goes to the old-boy network. That has not broken down in radiology. You go to some of these meetings and it's like they are trapped in the 1950s, the way everything is so traditional – the meetings are so dominated by men. I find some of the regional organizations are very boys' club-ish." – Participant 5 (man)</p>
"Boys' club" provides advantages to men and disadvantages women	<p>"I think there is a lot of promotion of friends among boys. I really do think the boys' club matters in respect to the National Academy. The people that are going to get in are the people who get the most votes. I bet people check off the people they know, and maybe they are just more likely to know men." – Participant 18 (woman)</p> <p>"The institution has this ingrained old boys' club in it. The women do not get raises. We do not get promoted. We do not get respected. We are given all the bad jobs to do. When leadership opportunities come up, we are never considered. Women consider this a terrible place to work." – Participant 45 (woman)</p> <p>"It was a boys' club thing more than anything else – [a woman I knew well] never experienced sexual harassment, but men in her lab would go and do something, and she and the other women in the lab would not get invited. They were excluded." – Participant 62 (man)</p>
Theme 2: The exclusion of women from networking activities dominated by men	
Subthemes	Illustrative quotes
Women may not be officially excluded, but they are effectively excluded	<p>"All the powerful events here happen on the golf course. The whole thing is golf at this institution. So whenever a woman leader is brought in, they say, 'Well, do you want to learn how to play golf?' But you have to be in the foursome. It's not like the men are ever going to let you in that foursome on the golf course." – Participant 10 (woman)</p>
Women's exclusion from networking activities may seem normal and unremarkable to men	<p>"As a trainee, you see what guys do, and you think, 'Oh, that's what these guys did, so I have got to do that kind of thing, too.' And that creates this culture of, 'This is the way it should be. This is how you do it if you want to be in.' And it did not feel like we were actively excluding the women, but I can tell you that if there was a woman resident, she would not have been invited to the golf games. It's like, 'It's a woman golfer. Would you play golf with a woman?' That kind of thing." – Participant 17 (man)</p>
Pervasiveness of men's networks	<p>"I think there's this whole parallel universe of the men talking to each other and supporting each other, and that forms a support system for helping them advance, and it always leaves [women] at a disadvantage. We do not get the email they sent to all the guys about something, or we were not at the reception where they sat in a corner and made some decision that I was not even aware was being made." – Participant 45 (woman)</p>
Theme 3: Professional advantages derived from participation in boys' club activities	
Subthemes	Illustrative quotes
Participation in decision-making processes	<p>"Big decisions are made on the golf course." – Participant 62 (man)</p>
Making connections that assist with professional advancement	<p>"On the golf course, you get to know people and make connections in a social environment, so if you need something professionally, you have contacts and people you can go to. When I needed letters for promotion, one of them came from the chairman of a department who it would look like I have nothing to do with, professionally, but I play golf with him every year." – Participant 2 (man)</p>
Direct access to people in leadership positions	<p>"I play golf, I go fishing and my golfing buddies and my fishing buddies are males, because that's just the way you do it. And it bugs the hell out of my female colleagues, because I go fishing with the president and the vice-president, etcetera, etcetera – and they do not. It gives me special access they do not have." – Participant 57 (man)</p>
Receiving research opportunities	<p>"The person who was ostensibly my mentor kept trying to take stuff away from me, kept trying to take away areas of my research. He would take things away from me and give them to the guys he played golf with. I was not invited on the golf trips. He invited the boys on the golf trips." – Participant 105 (woman)</p>

Theme 4: Women’s efforts to counteract their exclusion, and the limits of these efforts	
Subthemes	Illustrative quotes
Women’s informal interactions may provide company, but not professional advantages	“All the women chairs get together maybe every two months for dinner. I have only been to one of the dinners since I got here, and these women are so incredible. They are all self-confident and talented and funny and witty and not afraid to speak their minds. So we can enjoy each other’s company and share insights. Also, we go out once every so often for beer or wine, just to talk about things.” – Participant 41 (woman)
Creating and sustaining opportunities for informal professional interactions among women may require deliberate efforts	“When I was senior associate dean, I sent a note to a number of my women colleagues and I said, ‘We need to meet. We need to talk about what’s going on because [being a woman in academic medicine] is really hard to do and feel on your own.’ So I brought in the women chairs, we started to talk about it, and we expanded that into a women’s leadership group which we had for about a year. But when I left [that institution], I just left that responsibility, and it has not been reconvened.” – Participant 66 (woman)
Resistance to women’s efforts to bring women together	“So I invited the women faculty and fellows to get together. There are probably 40 of them. I said, ‘Bring your kids.’ One of the fellows has a demented mother she cannot leave alone. I said, ‘Bring your mom.’ But then, apparently one of the male fellows said, ‘Well, I would like to have a group like that,’ and now I am like, fine – we’ll do a men in neurology thing, too. I have to be careful because people say, ‘Oh, it’s feminist. Oh, she only cares about supporting women faculty.’” – Participant 66 (woman)
Resistance to women’s assistance of other women	“Men see themselves in other men, and they develop this bromance. It happens both on a peer level, and top-down. Women do not do that. There are not enough of us, for one thing. But in addition to that, I think [my woman colleague] would never help me in the way men help other men because she would think it would be perceived as nepotism.” – Participant 8 (woman)

Theme 5: Exceptions to the pattern: different forms of exclusion	
Subthemes	Illustrative quotes
Women may be excluded by other women	“When you are a single female with no children, you get a lot of, ‘You do not have children, so you are not part of our club.’ You are not on the soccer field when people are talking.” – Participant 33 (woman)
When women are in the majority, men may be excluded	“A lot of decisions about what fellow is going to do what research project or who is going to work on what paper with who are made at daycare meetings and Soul Cycle events. I am the only man, and there’s only one woman who is a cultural minority, and I think the rest of the women in the department have no idea there’s a problem. It’s so ironic to be in this position as a male. There’s so much denial about the problem [among my women colleagues], I think because most of my female colleagues still consider themselves to be the minority. If we had more diversity, I think there would be less tendency for folks to hang out with the folks they liked and go to Soul Cycle together and make the important decisions there.” – Participant 16 (man)

Table 3: Themes and illustrative quotes from academic medicine faculty.

professional interactions with other men, and that women usually were not included in these engagements. Men’s informal professional interactions with other men took many forms, but the activity mentioned most often was golf. While women were not necessarily officially excluded or explicitly discouraged from participating in networking activities such as golf, there were significant barriers to their participation. As one woman (Participant 10) in our study put it, “All of the powerful events here happen on the golf course. . .so whenever a woman leader is brought in, they say, ‘Well, do you want to learn how to play golf?’ But you have to be in the foursome. It’s not like the men are ever going to let you in that foursome on the golf course.”

Men also recognized that women were usually absent from men’s informal professional interactions. One man (Participant 17) described how the exclusion

of women came to be seen as normal, or unremarkable. “It did not feel like we were actively excluding the women, but I can tell you that if there was a woman resident, she would not have been invited to the golf games.” He noted that “as a trainee, you see what guys do, and you think, ‘I have got to do that kind of thing, too.’ And that creates this culture of, ‘This is the way it should be.’” Many of our participants explicitly described golf as a “boys’ club activity,” or an activity that indicated membership in the boys’ club.

Theme 2: recognition of a boys’ club and its implications

When asked about differences in women’s and men’s experiences of academic medicine, participants of both genders sometimes referred to a “boys’ club” or “good

ole' boys club" to describe the gendered nature of their professional environment. Some participants thought the boys' club or good ole' boys' club was hard to define, but nonetheless, they believed it had discernable implications. "I do not think the boys' club is something you can define, but... privileges come with [membership], and those privileges do not extend to the other gender," one man (Participant 89) said.

Other respondents had more specific ideas about what boys' club privileges included. One woman (Participant 45) believed that the "ingrained old boys' club" at her institution made it a "terrible place for women to work." "The women do not get raises," she told us. "We do not get promoted... we are given all the bad jobs to do. When leadership opportunities come up, we are never considered." Another woman respondent (Participant 18) believed the boys' club was a factor in men's ease in getting into the National Academy of Sciences, and women's lower admission rates. One man (Participant 62) noted that a feature of the boys' club was exclusion of women in a lab from things all the men would participate in.

Theme 3: professional advantages derived from participation in boys' club activities

The exclusion, or failure to include women, in boys' club activities such as networking events dominated by men had meaningful professional consequences. As one man (Participant 62) simply put it, "Big decisions are made on the golf course." Women and men alike recognized that women usually were not on the golf course when those big decisions were made.

Other respondents described additional benefits men derived from golfing with colleagues. One interviewee (Participant 2) told us that he made a valuable connection through golfing who wrote a letter of recommendation for his promotion. The two men had no professional relationship outside of golf. Another man we interviewed (Participant 57) described the unique access he had to the president and vice-president of his institution by virtue of golfing and fishing with these leaders. "It bugs the hell out of my female colleagues," this man noted, "because [these activities] give me special access [to institutional leadership] that they do not have."

Women, too, recognized the benefits men obtained from golfing with other men – and noted that they were sometimes disadvantaged as a result. One woman's (Participant 105) mentor took areas of her research away from her, and gave them to men in her lab he went golfing with. "I was not invited on the golf trips," she reported. "[My mentor] invited the boys on the golf trips."

Theme 4: women's efforts to counteract their exclusion, and the limits of these efforts

With one exception described in the following section, neither women nor men in our study reported that

women engaged in informal professional interactions in a manner that they considered remotely similar to men's networking practices. In contrast to many of our men respondents who described strong professional relationships with other men, many of the women we interviewed described the sense of isolation they felt in academic medicine by virtue of their gender. Some women felt isolated because of an absence, or scarcity of women colleagues, but others attributed their sense of isolation to a lack of community with other women.

Some women took action to address this problem: one interviewee (Participant 66) remarked, "I sent a note to a number of my women colleagues and I said, 'We need to meet. We need to talk about what's going on because [being a woman in academic medicine] is really hard to do and feel on your own.'" This led to the creation of a women's leadership group, which was the sort of informal professional activity women interviewees reported engaging in most often. Women described the benefits of participation differently than men described the benefits of informal professional activities. One woman (Participant 41) met with other women department chairs and mentioned the value of sharing insights, enjoyment of the other women's company, and the opportunity "just to talk about things." Notably, none of the women we interviewed spoke of obtaining professional advantages from their informal interactions with other women.

In addition, some women recounted receiving negative responses to their efforts to bring women together. "I invited the women faculty and fellows to get together," one woman (Participant 99) told us. "But then, apparently one of the male fellows said, 'Well, I would like to have a group like that, too.' I have to be careful, because people say, 'Oh, it's feminist. Oh, she only cares about supporting women faculty.'" Other women we interviewed believed that women could not help each other in the same way men do for this very reason. "I think [my woman colleague] would never help me in the way men help other men because she would think it would be perceived as nepotism," one woman (Participant 8) stated.

Theme 5: other patterns of exclusion

Most of our respondents spoke of a boys' club or indicated that men's networks and professional relationships were different from mixed-gender networks and relationships, and different from the relationships and networks women formed with other women. However, a few of our respondents described other forms of gender-related exclusion. One woman (Participant 33) shared that she felt excluded from informal interactions with her women colleagues because she did not have children. One man (Participant 16) reported that in a department dominated by women, many important

departmental decisions were made at exercise classes or daycare meetings.

Discussion

In this qualitative study of 52 women and 52 men academic medicine faculty members, participants identified a boys' club environment, characterized by gendered networking practices that advantaged men and disadvantaged women. Through gender-exclusive networking activities, such as golf, men established and maintained relationships with men faculty peers and built professional relationships with men in leadership positions or men from other departments or institutions. These relationships yielded different types of benefits, including solidarity within their unit, research assignments, letters of recommendation, robust networks within and across institutions, and direct access to people in leadership positions. These benefits translated into concrete professional advantages such as opportunities to publish, weigh in on important decisions, garner letters of recommendation from colleagues outside of one's home institution, and nominations to professional societies. These advantages then translated into measurable professional accomplishments, such as publications or promotions or membership in professional societies, which are ultimately presumed to be reflections of individual merit - rather than a function of one's professional network.

By contrast, women did not have access to the sort of networking opportunities and the resulting benefits that most of the men in our study described. They were not included in men's informal professional interactions, nor did they encounter an established, parallel set of activities dominated by women - or a set of mixed-gender networking opportunities. Although some women in our study attempted to create opportunities to socialize with women colleagues, their efforts to do so were constrained in ways that men's networking practices were not. Women spoke of time constraints and caregiving responsibilities that made getting together outside of work hours challenging. They also reported that their efforts to mitigate their isolation or offer collegial support to their women colleagues were met with disapproval from men. Other researchers have observed these phenomena, and note that while men's support for other men is considered a normal part of standard academic practice, women in academia may be accused of "favoritism" or "being too fanatical" if they "overdo" their support for other women.¹⁰ Thus, women may experience the double-bind of being excluded from beneficial networking activities which are dominated by men, and effectively prevented from engaging in countervailing practices with other women.

Our respondents perceived that these gendered networking relationships created a boys' club in academic medicine which conferred advantages to its members,

and excluded non-members from the privileges of membership. Scholars have noted that boys' clubs are institutionalized in professional life in the US and elsewhere, and are comprised of a variety of practices.¹⁴ Our participants reported - as other researchers have found - that informal professional activities dominated by men are a key component of boys' clubs.¹⁴ Respondents cited golf as a boys' club activity. Golf includes opportunities for sustained, small-group interactions to privately discuss professional matters in an informal setting.^{9,11,30} Women and men in our study did not report that women were officially prevented from golfing, but they noted that golf was nearly always the exclusive domain of men and that women's exclusion was considered normal and appropriate. Thus, gendered networking may create inequity in academic medicine by providing men with opportunities to accrue professional standing - and the impact of these practices on gender equity may be difficult to address because boys' club culture normalizes men's privileged access to each another in non-workplace settings.

Finally, while nearly all respondents emphasized the impact of men's informal professional interactions with other men on institutional climates and professional outcomes, a few interviewees described other forms of gender-related exclusion. This provides an important reminder that the capacity to exclude is circumstantial and tied to broader inequities. When women are in the majority in a given context, they may form gender-homophilous professional relationships as men do when they are, with meaningful professional ramifications for those who are excluded.¹⁰

This study has several limitations. Although there is much diversity within and beyond the gender categories of "women" and "men," this study employs only these two categories because so much previous research on gender inequities in academic medicine has relied on a binary conceptualization of gender. However, we recognize the value in attending to a broader range of gender diversities, and in making gender identity itself an object of inquiry. Similarly, although this study does not attend to the intersections between gender and other aspects of identity such as race/ethnicity, sexual orientation, class background, or disability, we recognize these intersections have bearing upon experiences of networking, inclusion, and exclusion in academic medicine.

Like other qualitative studies, this study was designed to surface new understandings of phenomena that other methods are not well suited to uncover, and to generate, rather than test hypotheses.³¹ Although there are many advantages to asking open-ended questions, one limitation of such questions is they limit the ability to make statistical inferences from the data. Thus we did not attempt to quantitatively assess the frequency or intensity of our themes across individuals, institutions, time periods, age, or career stage. Furthermore,

snowball sampling carries an inherent risk of bias when this strategy is employed exclusively. For this reason, we attempted to mitigate this risk via a combined approach with purposive sampling, interviewing equal numbers of women and men who were diverse in terms of age, rank, degree type, and location. Our participants were not selected randomly, and for this reason our results cannot be considered generalizable, though the size of our sample and our design focus on data adequacy does suggest that these findings may well be broadly applicable. It is important to acknowledge that recall and self-reporting bias are inherent limitations of this style of research.

Finally, this paper does not provide a comprehensive explication of boys' club practices and the ways our participants experienced and observed them. Boys' clubs are multi-faceted and are comprised of more than networking activities such as golf, but we focus on these practices in this paper because of their salience within our data.¹⁴

Researchers have found that tremendously consequential professional activities happen outside of formal worksites and work practices.⁹ Our findings indicate that this occurs in academic medicine, and may have important implications for understanding gender inequities in this professional context. Much attention has been devoted to examining how gender inequities are produced within formal worksites and work practices, and to creating policies to mitigate these inequities. Our findings suggest that significant professional advantages and disadvantages may accrue in social networks outside of the scope of this research and beyond the reach of policies intended to foster gender equity in academic medicine which focus on process that occur within formal worksites and work practices. While additional research is needed to better understand boys' club practices such as informal networking activities dominated by men, our findings suggest that policy makers may need to take these practices into account in order to develop effective policies to promote gender equity.

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Contributors

JRG, DD, and MM conceptualized and designed the study. JRG was responsible for collection of data. MM and JRG undertook coding and qualitative analysis. JKC was responsible for quantitative analysis. MM undertook manuscript preparation. All authors have directly accessed and verified the underlying data reported and contributed to review and editing of the manuscript.

Data sharing statement

Given the high risk of compromising anonymity of subjects, we do not plan to make public data associated with this study, including transcripts or de-identified patient data.

Declaration of interests

The authors report no conflicts of interest.

Supplementary materials

Supplementary material associated with this article can be found in the online version at doi:[10.1016/j.eclinm.2022.101338](https://doi.org/10.1016/j.eclinm.2022.101338).

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