Original Article

A Qualitative and Quantitative Examination of Gender Role Attitudes of Residencies and their Exposure to Gender Discrimination

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Abstract

Background: Gendered attitudes have been observed in medicine over the last 50 years, and the effects of social gender inequality can be seen in professional practices from various perspectives. We aimed to examine the attitudes of residency physicians towards their gender roles, and also to examine their exposure to gender discrimination while performing tasks in their daily work-life.
Methods: This study was a cross-sectional type phenomenological research using a mixed method design. It was designed using the sequential strategy within the explanatory pattern. In the quantitative part of the study, 81.3% of the residency students were accessed, and a survey consisting of 78 items was performed using face-to-face interviews. In the qualitative part, personal interviews were performed with 11 residency students who were selected using the purposeful sampling method.
Results: According to studies in medicine, the areas of specialty and the tasks to be performed in daily work-life were classified based on gender. Female physicians were exposed to gender inequality and discriminative attitudes, especially in surgical departments.
Conclusion: Gender roles attributed to women negatively affect their professional and academic lives.
Keywords: GENDER, WOMEN'S HEALTH, RESIDENCY PHYSICIANS, MIXED METHOD

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Introduction

Gender expresses the roles, behaviours and activities imposed on the men and women by the society (1). Gender is not about biological differences, it is about how the society sees, perceives, thinks, and expects us to behave as women and men (2). Gender discrimination is the situation in which individuals are treated negatively due to their gender and cannot benefit from some opportunities, resources. and rights. Throughout their lives, women are subjected to unequal treatment more often than men because of their sex. It is mostly women who are at the center of discrimination in all corporate and social areas such as home, the work place, and the market. Examples of these are that women are responsible for household chores and earn less than men who have the same level of education in their professional life (3).

Gendered attitudes have been observed in medicine over the last 50 years, and the effects of social gender inequality can be seen in professional practices from various perspectives (4). Those cases in which individuals are treated negatively, or in which they cannot enjoy certain rights, opportunities or resources due to their gender, are examples of social gender inequality (5). In business life, women generally experience disadvantages at a higher level, and the invisible barriers constituted by social pressures are referred to as a "glass ceiling" in the literature (5).

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Considering the effect of gender on the medical discipline, it can be seen that the number of male physicians is higher than female physicians in many countries around the world; this difference in the number of male physicians further increases in surgery departments (6-9). In Turkey, according to data for the year 2014, 61% of the physicians were male and 39% were female, whereas 51% of research assistant physicians were female and 49% were male (10). In the same report, it was stated that regarding the distribution of specialties by gender, the number of male physicians was higher in surgery departments in other countries around the world. The first five specialties in which male physicians work are general surgery, internal diseases, orthopedics and traumatology, urology, and gynecology and obstetrics. In contrast, the first five departments in which female physicians work are anesthesiology and reanimation, pediatrics, internal diseases, gynecology and obstetrics, and neurology (10). Six out of the 10 most preferred specialties for men were in surgery departments, whereas only two out of the 10 most preferred specialties for women were in surgery departments (10). Even though gynecology and obstetrics is one of the specialties in which female physicians play a significant role, there are nonetheless studies indicating that gender inequality also exists in this branch from an academic perspective (11).
Social gender inequality also influences patient-physician interaction, as well as specialty choices. In previous studies, it was shown that the gender of a patient or physician might cause differences in the demand and supply of medical care services (2, 12-14). Especially in patriarchal societies, due to the sociocultural and religious norms, it is very important for the patient and physician to be from the same gender (15). To reveal the underlying reasons for gender differences, many studies have examined the social factors underlying the patient-physician interaction and health behaviors (16).
Besides the gendered attitudes of the society (patients, other healthcare professionals, etc.) towards physicians, the physicians themselves also have gendered attitudes towards each other. Moreover, physicians, about whom there is high level of perception of social gender inequality, might sometimes reflect this perception in their professional practices and scientific research (4). It can be seen that gendered blindness, male bias, and social gender role ideology underlie all these behaviors. Social gender blindness is defined as ignoring the problems related to female health (except for reproductive health), whereas male bias in medical science is defined as the potential of masculine behaviors and thoughts to cause favoritism in scientific research and at the knowledge level. Additionally, gender role ideology is defined inadequate care providing for patients due to the gendered thoughts of the physicians, the risk of problems in the patient-physician relationship due to social gendered communication types, and the feminine and masculine characteristics leading to taking different risks, and thus the emergence of different health problems (4).
In the literature, there are studies done in different disciplines on social gender and medicine using qualitative and quantitative research methods, and these studies have had positive effects on health outcomes (17). Using qualitative and quantitative methods we aimed to examine the attitudes of research assistant physicians these two words towards the social gender role and their exposure to sexism while performing their tasks.

Materials and Methods

This study was a cross-sectional type phenomenological research using a mixed method design. It was designed using sequential strategy within the explanatory pattern. The study was done during 04.15.2016 and 06.30.2016 in Akdeniz University Medical Faculty (AÜTF) and Antalya Training and Research Hospital (AEAH). In this study, 369 research assistant physicians working at AEAH and 183 research assistant physicians working at AÜTF (551 physicians in total) were enrolled.
The survey form used in collecting the

quantitative data consisted of 78 questions covering four domains: sociodemographic characteristics, working life, Social Gender Role Attitude Scale (SGRAS), and exposure to sexual discrimination in business life. In total, 81.3% of the 551 physicians were reached. In this study, the qualitative findings of the research will mainly be discussed. However, to maintain integrity, the quantitative findings will also be briefly discussed.

The maximum diversity sampling method, which is one of the purposeful sampling methods, was used for the qualitative research group. Variables such as the specialties of the physicians (internal diseases, surgery, and basic sciences), their marital status, and whether or not they had a child, were taken into consideration while preparing the diversification. Moreover, since the social gender role perceptions, behaviors and attitudes and the exposure to sex discrimination results obtained from the quantitative analyses differed among men and women, and given that it was determined that women are exposed to discrimination more than men, it was decided that choosing a female-weighted sample group would be more appropriate. To summarize, the sample group consisted of 11 individuals: four women and two men working in internal medicine, three women and one man working in surgical sciences, and one woman working in basic sciences.

The analyses of the qualitative data consisted of transcription, data coding, theme selection, descriptive analysis and content analysis, and interpretation based on the determined themes. The voice records obtained from face-to-face interviews were directly analyzed and then transferred to the qualitative data analysis software NVivo-10. The analysis was executed using this software. The interviewed individuals were numbered between G1 and G11, and the qualitative dataset was obtained by transcribing the interviews. The obtained data were transferred to NVivo-10. Themes were created in NVivo-10, and the sentences selected from the dataset were linked to the appropriate themes in this software through use of the "recall" function. In parentheses, it was stated which interviewer stated the cited texts and which main- and sub-theme they were related to. For instance, a "(G1, 4;3)" statement following the cited text indicated that the text was supplied by the first interviewer and was related to the third sub-theme of the fourth main theme.

For the present study, the approval No: 70904504/481 dated 11/03/2015 was obtained from the Clinic Research Ethics Committee of the Medical Faculty of Akdeniz University. The institutional approval No: 81266704 was obtained from Antalya Training and Research Hospital on 11/05/2015.

Results

Quantitative Results

59.7% of the participants were male. In surgery departments, men (72.0%) participated to a greater extent, whereas in basic sciences, there were more women (76.9%) ($P=0.0001$). In accordance with the scores of SGRAS, female participants or those who worked in basic sciences have more equalitarian attitudes. Regarding the responses given to statements related to exposure to sex discrimination in business life, female physicians display the following characteristics;

more intensely feel the negative effects of their gender in their professional life,

are exposed to more discrimination in their professional life,

not only work in hospital, but also they have a heavy work load at home, and

have disadvantages in terms of their academic career, especially in surgery.

Qualitative Results

Medicine and Social Gender

Nine sub-themes were determined about the effects of social gender on medicine. The sub-themes that were determined and the frequency with which they were mentioned are presented in Table 1.

Most participants (81.8%) stated that they consider female physicians to be exposed to

Table 1: Medicine and social gender

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	f	%
Negative discrimination towards female physicians by colleagues		√	√	√	√	√	√		√	√	√	9	81.8
Effect of gender on specialty preference	√		√		√	√	√		√		√	7	63.6
Negative discrimination towards female physicians by other healthcare professionals				√		√	√	√		√	√	6	54.5
Effects of physical characteristics	√	√	√			√	√	√				6	54.5
Female physicians forced to make sacrifices and to change in business life		√			√		√	√			√	5	45.4
Problems arising from the legal rights of female physicians	√	√							√		√	4	36.3
Positive discrimination towards female physicians by faculty members						√		√		√	√	4	36.3
Effects of behavior and clothes	√	√				√					√	4	36.3
Effects of biological characteristics	√		√				√					3	27.2

G: Observer f: Frequency

negative discrimination by their colleagues. It was stated that the individuals responsible for such negative discrimination are the physicians who have similar status, as well as the faculty members. Examples of the opinions of participants are presented below:

"For instance, I have clearly seen that the assistants in some wards didn't want women in their wards; they even said this. The assistants force the newcomers, who come for a speech, to leave. They said "this department is very bad, it's very difficult, do not come." (G7, 3;1).

"If we work as a team of 5, I would not want the 6th one to be a female physician. If two of them give birth, I would have to do the night shifts." (G9,3;1).

More than half of the participants (63.6%) stated that they think that gender affected choice of specialty.

"The departments, in which the female physicians can comfortably work are dermatology, FTR, biochemistry, public health, and so on. They choose the less-tiring departments, because they also have to do the housework. They are responsible not only for the hospital but also the housework. When entering the home, then you become the lady of the house" (G6, 3;2).

54.5% of the participants stated that they believe that female physicians are exposed to negative discrimination by the other healthcare professionals and their physical characteristics have an effect on their career in medicine.

"I believe that the allied health professionals working with us are more tolerant and kinder to male physicians. For instance, when a female physician asks them to do something, they might say "OK" and delay the task for a couple of days. But, when a male physician asks for the same thing, then they fulfill the task immediately" (G11, 3;3).

Almost all of the female physicians believed that they are exposed to discrimination because of their gender, and that differences in physical size heighten this discrimination.

"Let's assume that a patient walks in and requires a doctor. One of the physicians is me, a girl of 160cm height and 50 kg weight who wears glasses. The other is a tall and large-bellied man with white hair and a goatee. If we ask that person, "by whom do you want to be examined?" he/she would prefer the man. In other words, not only the gender but also physical characteristics play a significant role" (G1, 3;4).

"While working as a night shift practitioner in the emergency service, I worked with a bald and fat man who seemed to be like most old physicians. The patients were generally thinking that he was the physician. I don't know if it is because he was a little bit older, or if he was a man, but I saw that the patients

listened to him more" (G3, 3;4).

45.4% of participants stated that female physicians have to make sacrifices in business life and also to change themselves in some way.

"The girl (research assistant in surgical sciences) is running after the faculty member even though she has been dishonored. It can be said that she needed to serve the faculty member. She was serving tea, for example. We had faculty members describing what clothes the female surgeons should wear and what haircut they should have" (G5, 3;5).

The physicians interviewed emphasized that they believe that behavior and clothes play an important role in the field of medicine. They stated that female physicians exhibiting cheerful and talkative behavior are exposed to more negative attitudes than men.

"Clothes make people think that you are a good or bad physician. If you want to be a physician, then you need to be more serious. Even though you are good in your specialty… the surgeons especially curse next to the patients. They behave in any way they want. People think that he is paying attention to them. But, if the one cursing is a woman, then things suddenly change. People start to label you. In this atmosphere, your behaviors dominate your medical practice. But, conversely, the same behaviors are an advantage for a male physician" (G6, 3;8).

Social Gender in the Physician-Patient Relationship

There are four main themes concerning the physician-patient relationship. The sub-themes, as well as the frequency with which these sub-themes were mentioned during the interviews are presented in Table 2.

The most important problem specified by 81.8% of the participants was the disrespectful attitudes of patients towards female physicians. The opinions of participants are presented below:

"I have even been called "Mr. Doctor". We are nurses, interns, personnel, but they (men) all are physicians" (G2, 4;1).

"I don't know if it is because I seem younger, but people generally call me "Ms. Nurse". The elderly male patients generally call me "daughter". Sometimes, the elderly women call me "honey". A woman called me "sweetheart" a short time ago; I was shocked in that moment" (G4, 4;1).

72.7% of participants stated that patients disrespect female physicians.

"I saw that patients might behave in a more agitated way towards the female physicians, but they refrain from the male physicians. In other words, they believe that one can shout at a female physician, since she is weaker." (G3, 4;2).

63.6% of the patients stated that they believe and observe that the patients place more trust in male physicians.

"Sometimes, even if I have performed his/her surgery, the patient doesn't like the information I have given and asks for information from a male physician by calling them. They consider not us but them (men) to be physicians." (G2, 4;3).

"In any difficult situation, or when they first enter into a room, they look at the face of male physicians, but they consider us incapable of meeting their needs. These are my general observations. They generally do not trust women,

Table 2: Social gender in the physician-patient relationship

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	f	%
Patients' wrong form of addressing female physicians	√	√	√	√	√	√	√	√		√		9	81.8
Patients disrespecting the female physicians	√	√	√	√	√		√			√	√	8	72.7
Patients trusting male physicians more	√	√		√		√		√	√	√		7	63.6
Patients intervening the private lives of female physicians	√	√		√								3	27.2

G: Observer f: frequency

Table 3: Physicians and social/private life

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	f	%
Effects of working as physician on spouse selection		√	√			√	√	√	√	√	√	8	72.7
Negative effects of working as physician on social life		√	√	√		√				√	√	6	54.5
Positive effects of working as physician on social life			√			√		√		√		4	36.3
Negative effects of working as physician on private life	√	√	√						√			4	36.3
Positive effects of working as physician on private life		√			√			√				3	27.2

G: Observer f: frequency

and they think that: 'women can be nurses, whereas only men can be doctors." (G8, 4;3).

Physicians and Social/Private Life

Regarding the effects of working as a physician on social and private life, five sub-themes were determined. The sub-themes, as well as the frequency with which these sub-themes were mentioned during the interviews are presented in Table 3.

72.7% of participants stated that working as a physician influenced spouse selection; while 27.2% of participants stated that female physicians have to make sacrifices in their private lives. Regarding spouse selection, the physicians stated that marrying a person suitable to their social status was a facilitating factor for both their business and private lives.

"If it is possible, they should marry a healthcare professional; even another physician, if possible. To explain: I might be called in at midnight and I might go. They [spouses who are not physicians] cannot understand this situation, but a physician can understand. Maybe even only a surgeon can understand." (G2, 5;1).

"I believe that marrying someone from their profession would be better for a physician wanting to marry. However, someone from another profession that has a social status like that of physicians can also be appropriate. But it doesn't apply to them (male physicians), I guess, because they can even marry a nurse. They primarily prefer this option, because they want their wives to work more comfortably and to be able to do household duties." (G11, 5;1).

"When it comes to caring for a child, I get tired more. In fact, we also have problems because of this." (G5, 5;5).

Discussion

In this study, in which the social gender perceptions of research assistant physicians were examined using a mixed method design, an attempt was made to discuss the data obtained by employing both qualitative and quantitative methods. Given the distribution of physicians, it can be seen that the physicians working in surgical sciences were generally male, whereas those working in basic sciences were female; this finding was consistent with previous studies. The reports from around the world and Turkey in particular indicate that male physicians dominate the surgery departments (6-10). Moreover, there are also numerous studies on the effects of gender on physicians' selection of specialty. In many of these studies, it has been shown that male medical faculty students tend to choose surgical sciences, whereas female students might be faced with various gender-based difficulties, especially in surgery departments (18-21).

In this study, females and physicians working in basic sciences had more equalitarian attitudes, whereas males and those physicians working in surgery departments had more traditional attitudes. According to one study in the USA, female physicians more frequently felt that they

were exposed to sex discrimination than men, and that this discrimination generally originated from the male physicians they are working with. For this reason, the female physicians stated that they perceive the field of surgery as "an old men's club" (22). In another study on students from 14 medical faculties in England, women reported that they were exposed to sex discrimination and sexual abuse more than men. The areas in which the women felt the discriminatory behaviors most frequently were in general surgery, emergency medicine, internal medicine, and neurology (23). In a study in Pakistan, which has a different sociocultural and economic structure compared with European countries and the USA, it was found that most of the students (78%) were exposed to sex discrimination and the main victims were women (70.8%) (24).

In the face-to-face interviews, it was stated that physical characteristics play an important role in any domain of medicine (especially in surgery departments), and that being male, tall, strong, tough, and bulky is considered as an advantage. Moreover the physicians emphasized that petite women tend to be underestimated, since women are considered to be weaker than men, and that female physicians are frequently called "Ms. Nurse" or "Mr. Doctor". According to the statements of the participants, besides gender, the physical and biological characteristics are other reasons for discrimination, and these physical characteristics also affect specialty selection. The female physicians emphasized that they avoid selecting those specialties requiring muscle power and have to make certain sacrifices, as well as changing certain aspects of their lives to select those departments. These findings are in line with many studies in the literature. In previous studies, it was reported that female physicians are generally expected to be passive, and that the dominating idea is that positions requiring active physical power are more suitable for men, similar to the leadership positions. For instance, in face-to-face interviews performed with 25 female physicians in Saudi Arabia, it was determined that the career development and leadership experiences of women are influenced by their gender. One of the interviewers emphasized that she was the first woman to be chosen by her current department, and that she wasn't wanted by some of the academic council members simply because she was a woman. In the same study, a female interviewer working as a hematologist stated that hematology wasn't her first choice, and that she had actually wanted to be a cardiologist, but her cardiologist colleagues had forced her to take a step backwards, because the cardiology department requires interventional practices and long working hours. The main reason underlying this decision was that she had children (25). This statement indicates that women make professional sacrifices and are required to remain passive. In a study in England (26), women were exposed to sex discrimination 2.5 times more than men. Women who reported being exposed to discrimination had slower progress in their academic careers than other women with whom they were at same productivity level.

By examining the role of social gender in the physician-patient relationship, we found that there were certain behavioral patterns assigned to physicians and these patterns varied between male and female physicians. The female physicians emphasized that society expected them to behave more seriously, whereas it is normal for men to behave more loosely. When the interviews were analyzed in detail, we found that the main problem regarding the role of social gender in the physician-patient communication was the negative discrimination towards female physicians by patients. Most wmoen and men stated that the patients disrespect female physicians and had more trust in male physicians. It is noteworthy that this opinion was expressed by all the physicians working in surgery departments. Our results regarding physician-patient relationships are consistent with those in the literature. A female physician in Saudi Arabia stated that some of the patients hesitate when they see her, and that these patients prefer male physicians. Thus, she claimed that

she had to work much harder to gain their trust, and it is not easy. According to this Saudi female physician, patients believed that male physicians, especially older ones, were better than female physicians (25).

When interpreting opinions regarding the effects on social and private lives of working as a physician from a general perspective, 72.7% of physicians stated that the intense working environment and higher status of medicine might influence the selection of a spouse. In the literature, there are various studies examining the effects of working as physician on spouse selection. In the research "Business/Life Profiles of Today's Physicians" published in 2014 (27), almost 40% of physicians stated that they had married either a physician or a healthcare professional. In the mentioned study, which specifically reported the opinions of physicians married to a colleague or a healthcare professional, a female physician married to a urologist stated that she worked unbelievably hard, and it was very difficult to explain this to people who are from any environment other than the medical world why she had to work on special days such as Christmas, or at 2am in the morning. According to this female physician, spouses in a physician-physician marriage can speak the same language and share similar experiences, thus the responsibilities needed to maintain a relationship can be evaluated by both spouses from a physician's perspective, and it might therefore be easier to take responsibility. Another physician stated that the marriage of a physician to another physician was advantageous from both psychological and emotional aspects. According to the interviewer, it might be difficult for a physician to be with anyone who cannot understand the difficulty a physician feels when he/she has lost a patient or performed a difficult operation, because most people probably only witness one or two deaths throughout their lives.

The factors that contributed to the objectiveness and reliability of our study were being able to contact 81.3% of the specialty students, and the willingness of students to participate in the study and the face-to-face interviews. The fact that the face-to-face interviews were performed by a research assistant physician might be advantageous for the study, or, conversely, may pose a limitation. Because of the nature of qualitative studies, the fact that the researcher is from the same profession as the interviewers and shares the same work environment and encounters the same difficulties might have enabled the interviewees to feel more comfortable and give more honest answers. On the other hand, the interviewers working in the same institution with the researcher might have behaved apprehensively when expressing the problems with the institution and the people working in the institution.

Conclusion

The issue of social gender, which plays an important role and is seen in every domain of life, has an incontrovertibly important influence on medicine. Despite the fact that there are no legal regulations preventing women from choosing surgery departments, the specialties are nonetheless divided based on the gender. Even though there are no real legal limitations, "the rules set by society" in terms of social gender perception serve to direct the professional and academic careers of female physicians. In societies in which the rules are set according to social gender norms, women not obeying the social rules, and instead choose surgery departments tend to be judged by their colleagues, faculty members, and patients, as well as other healthcare professionals. These women generally have to make sacrifices in their business lives and social/private lives because of their social gender roles and responsibilities.

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