

Education and medicine: the feminization of medical schools

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Abstract

Objective: To analyze the difficulties and facilities of women physicians and graduates of the medical course at the Higher School of Sciences of the Holy House of Mercy of Vitória (EMESCAM) in entering the labor market.

Methods: Analytical exploratory and qualitative study that seeks to elucidate and understand the feminization of the medical profession, as a complex process of constitution of subjectivity that encompasses the insertion of women in the labor market. An online questionnaire was sent to the email of 2,510 EMESCAM graduates who completed their graduation in the period between 1981 and 2015.

Results: Of the 319 questionnaires answered, 152 (47.64%) were answered by women, but of the 319 responses obtained 289 were considered valid for the characterization of the medical specialty described in alphabetical order. Endocrinology specialty is highlighted, in which 100% of the professionals analyzed in the questionnaire are female. Furthermore, there is a predominance of women in Dermatology (80%), Pediatrics (78.9%), Neurology (66.7%) and Gynecology and Obstetrics (59.1%). On the other hand, females were less frequent in General Surgery (26.1%) and other specialties evaluated. Difficulties such as “being a mother”, “being a woman”, “being a female surgeon” were also reported.

Conclusion: This article highlights some reflections about how real this feminization is, and points to a greater number of women in medical schools, but having to deal with a labor market in which men still receive higher wages and still predominate in specialties considered masculine.

Keywords: Feminization; Medical Education; Women; Professional Training.

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● INTRODUCTION

The 1970s were marked by changes in medicine and medical education. The greater circulation of women in medical schools currently observed is in line with the gradual increase over the years. This increase is observed not only on more undergraduate academics, but also on women being part of the professor board and management of educational institutions¹. However, it is noted that the gender issue is still little addressed in teacher training courses².

The sexual segregation of professions is the most visible expression of inequalities between men and women. The concentration of women and men in different types of work, professions and sectors of activity is characterized as horizontal or occupational segregation. Vertical segregation, described as “glass ceilings”, translates the insertion of men and women at different levels of hierarchy, qualification and wages³. Vertical segregation occurs when, theoretically, opportunities are open and offered to all, but the characteristics that determine the occupation of the function are difficult for certain groups, such as women. Thus, these indirect discriminations are evident, with disparities in the effective reach of material equality⁴.

Currently, men are still the majority among physicians, with 54.4% of all professionals, with women accounting for 45.6%. However, this distance has been reducing every year, with females predominating among younger physicians, comprising 57.4% in the group up to 29 years old, and 53.7% in the age group between 30 and 34 years old, according to data from the Demografia Médica survey 2018, held by the Faculty of Medicine of the University of São Paulo (USP) with the institutional support of the Federal Council of Medicine and the Regional Council of Medicine of the State of São Paulo⁵.

The rapid feminization of the category can be observed through data released by the Medical Demography in the State of São Paulo, in which among the new enrollments in Cremesp in 1980, only 31.41% were women; and in 2015 this number grew by 66.19%.

When comparing Brazilian states, female physicians outnumbered men in just two states: Rio de Janeiro, where they account for 50.8% of professionals, and Alagoas, with 52.2%⁶.

As a large part of the population is aware, in the past, the labor market was mostly made up of men and until the mid-1960s this scenario remained the same in Brazilian medicine, following a worldwide trend.

Despite being a great achievement for women, it cannot be denied that difficulties are still encountered in the academic and labor educational environment. Today, although the representation of women in medical school classrooms is greater than the number of men, the sexist hierarchy continues to prevail in some aspects.

Although it is not a legitimately valid criterion, motherhood often becomes one of the cut-off factors in the selection process for medical residency, while fatherhood does not seem to influence this choice in any way¹. Thus, it is up to women to follow the same path as men during medical training, but still permeated with challenges and, often, prejudice.

Even with medical feminization, women still suffer negative impacts caused by sexist stereotypes and gender discrimination. Some authors suggest that decision about the trajectory to be followed in the career and, also within medical education, is apparently based on personal interests and preferences. However, such choices are directly influenced by the social bases of origin⁷.

In this regard, feminism led to an increase in questions about the status of women in society and the intensification of women's social movements. Thus, this theme becomes a legitimate object of scientific study with growing interest in academia⁸.

Faced with a scenario of transitions in the medical profession, it becomes necessary to understand the process of increasing women's participation in Brazilian medicine, in addition to broadening the discussion regarding segregation present in this field. Thus, the objective of this study is to analyze the difficulties and facilities of female physicians and graduates of the medical course at the Higher School of Sciences of the Holy House of Mercy of Vitória (EMESCAM) in entering the labor market.

● METHOD

This is an exploratory analytical study of a qualitative nature that seeks to elucidate and understand the feminization of the medical profession, as a complex process of constitution of subjectivity that encompasses the insertion of women in the labor market.

The study participants were the 2,510 EMESCAM graduates who completed graduation in the period between 1981 and 2015. The e-mail addresses of the graduates were located at the Academic Secretariat of EMESCAM and at the Regional Council of Medicine of the state of Espírito Santo (CRM-ES).

Graduates whose email addresses were not identified and those who did not respond to the questionnaire were excluded (2,191). Thus, the sample comprised 12.70% of the total, which is close to the expected response rate (10%) for online surveys⁹. It is worth mentioning that the number of participants in qualitative studies 10 is not of great relevance considering that it is a research that prioritizes the descriptions of the experiences lived by female doctors in the labor market.

The instrument used was a questionnaire with closed questions that allowed characterizing the graduates in terms of gender and the specialty chosen to work in the labor market. The instrument's open question allowed the graduates to describe the facilities and difficulties they encountered in entering the labor market.

Data collection was based on sending the questionnaires, which were reformatted and inserted into a Google tool, allowing the egress to access them through the link: <https://drive.google.com/drive/my-drive>. The questionnaire answered by the graduates was forwarded via the email address egressos.emescam@gmail.com.

The data were organized in an Excel table and received statistical treatment using the StatisticPackage for the Social Sciences (SPSS) version 23.0 for Windows, with a descriptive analysis of the data using frequencies and percentages. The answers about the facility and difficulties of female physicians and EMESCAM graduates

in entering the labor market were categorized based on the transcription, reading and analysis of the responses. The project was approved by the Research Ethics Committee (CEP) of EMESCAM under opinion number 1.865.041.

● **RESULTS**

The feminization of medical schools is a Brazilian reality that was also pointed out in this study. Even with an increase in the number of women as medical students, there is still a predominance of men, especially in surgical specialties and in those that provide urgency and emergency care, such as orthopedics.

Justifications such as the idea that there is a need for greater strength and physical resistance, more time-consuming training or a requirement for greater availability of time, are often found for the condition¹¹.

The differentiation of work performed by men and women is based, in general, on physiological and eugenic reasons, relating women’s physical characteristics, reproductive function and physical strength; biological; spiritual; moral and family, which link concepts of “women’s protection at home”¹².

This reality reinforces market segmentation, in which gender differences still have the ability to increase or reduce an individual’s chances of success.⁴

Of the 319 questionnaires answered, 152 (47.64%) were answered by women, but of the 319 responses obtained, 289 were considered valid for the characterization of the medical specialty, described in alphabetical order in Table 1.

Table 1: Medical specialties followed by medical graduates from EMESCAM (1981-2015), Brazil (n=289)

Specialty	Sex		Total
	Feminine	Masculine	
Anesthesiology	4 (33.3%)	8 (67.7%)	12
Cardiology	4 (28.6%)	10 (71.4%)	14
General surgery	6 (26.1%)	17 (73.9%)	23
Dermatology	8 (80.0%)	2 (20.0%)	10
Endocrinology	8 (100.0%)	0 (0.0%)	8
Gynecology and Obstetrics	13 (59.1%)	9 (40.9%)	22
Neurology	6 (66.7%)	3 (33.3%)	9
Orthopedics	3 (25.0%)	9 (75.0%)	12
Pediatrics	15 (78.9%)	4 (21.1%)	19
Psychiatry	5 (45.5%)	6 (54.5%)	11
Others	80 (53.7%)	69 (46.3%)	149
Total	152 (52.6%)	137 (47.4%)	289

Source: Research data

One can highlight the area of endocrinology, in which 100% of the professionals analyzed in the questionnaire are female. Furthermore, there is a predominance of women in Dermatology (80%), Pediatrics (78.9%), Neurology (66.7%) and Gynecology and Obstetrics (59.1%). On the other hand, females were less frequent in General Surgery (26.1%) and other specialties evaluated.

Studies corroborate these data, demonstrating that among 53 officially recognized specialties, 13 were performed mostly by women, with male predominance in the remaining 40.

Among these, women were the majority in Pediatrics, Gynecology and Obstetrics, Internal Medicine, Family and Community Medicine and Preventive Medicine¹¹.

According to the demographic medical census carried out in 2018 by the Federal Council of Medicine (CFM), the medical specialties of Dermatology, Pediatrics and Endocrinology and Metabolism are the most practiced by women, with at least 70% of female specialists in each of these areas. In dermatology, there is an average of three women for every man.

Thus, it is observed that gender is determinant in the way the medical career is structured. Although it presents better opportunities within professional life, different trajectories are identified between men and women, although it is currently more common to see female doctors in the surgical area or in cardiology, for example, and not only in areas considered more “feminine”, as in the past⁸.

● **DISCUSSION**

Women and medical specialties

In the area of neurology, according to the Brazilian Academy of Neurology, there was a feminization of its members. However, in 2010, men still dominated the specialty in adult neurology, while in the pediatric area there was a female predominance. Gender disparity is also common in major medical journals, despite increasing female participation in article authorship¹³.

Evaluating the participation in articles published in Arquivos de Neuro-Psiquiatria, the official journal of the Brazilian Academy of Neurology, between 1945 and 2005, an increase from 2.8% to 36.6% in the participation of women as first author is described and from 2.8% to

23.8% as the last author¹³. These data incorporate positive scenarios regarding the continuity of medical education.

This increase in percentage of women as first author is able to reflect their performance in research fields, so necessary to the current Brazilian reality. In addition, the increase in women as the last author dialogues with the possibility of greater female participation as advisors, for example.

Despite the growing female participation in Medicine, male hegemony in this field is still very notorious and goes beyond medical residency programs, also extending to teaching areas, since the presence of specialists is extremely necessary to teach certain disciplines¹⁴.

Due to this strong relationship between education and the profession, a chain reaction is triggered, ranging from admission to the Faculty of Medicine, approval in the Medical Residency to hiring the teaching staff. The medical school's educational team is often made up of former students of the institution itself, a very common practice, started in the past, where the female gender was extremely undervalued, but which is still reflected in the present. For this reason, one can see the scarcity of women in the medical field, including the teaching area¹⁴.

Teacher training, before any hiring, must analyze the curriculum of each candidate individually and without distinction of gender, paying attention to the physician's future objectives, qualification and knowledge of content and mastery of didactics in the classroom, as the ability to practicing medicine and teaching it are not necessarily interconnected, nor it is related to gender. Not always a good doctor will be a good teacher¹⁴.

The present work corroborates the idea that female medical profession is negatively impacted by sexist stereotypes and gender discrimination. Among the difficulties for the insertion of women in the labor market described in the applied questionnaire, four categories that would emerge from the participants' reports are analyzed: being a woman, being a female surgeon, being a mother and wage gap.

Being woman

Research dedicated to study and compare the training process of men and women in medicine conclude that sexist stereotypes and gender discrimination, present since graduation, negatively impact women. Gender discrimination is present in the direct and/or indirect barriers that prevent to rise in the medical career on an equal basis with men¹⁵.

This occupational segregation, initiated during the training process, reproduces male and female ghettos within the profession and can hinder women's access to specialties and areas of greater prestige and remuneration¹.

The "permanence within change and through change" is a social phenomenon present when a profession becomes feminized, in which, parallel to feminization, there is a desertion on the part of men. This is because, by becoming more feminine, this profession also becomes less valued, it becomes seen as inferior.

Bourdieu¹⁶ explains that, in this case, the devaluation is doubled, because, in addition to causing

mass desertion of the male workforce, the female insertion also entails the social or economic devaluation of the profession. In medicine, the phenomenon of permanence within change can be perceived through the male evasion of some specialties that have come to be considered "more feminine", such as dermatology mentioned above.

Being a female surgeon

It is known that until the 1960s, the few existing female surgeons encountered a hostile environment, which mentions, for example, the absence of a women's changing room, adequate clothing or any other facility.

Patients often said they preferred to operate with men, and female surgeons were still targets of unpleasant comments and were commonly confused with scrub nurses or nurses.

Although nowadays gender prejudice has been reduced, the education of women in some families continues to favor low self-esteem and intellectual insecurity, since society increasingly demands physical values¹⁷.

In addition, the lack of stimulating role models in successful female surgeons also comprises a difficulty present in the lives of women who intend to pursue a career in surgery¹⁷.

Another factor that contributes to the permanence of gender stereotypes in the selection process for residency is the small female representation in the faculty of specialties considered "male". Thus, the existence of female models as mentors and advisors is important¹.

Being a mother

When considering the concept still present in today's society that raising children and taking care of the house are primarily female activities, it is noted that the simultaneous professional growth with the formation of a family affects women much more than men.

As a result, many women postpone pregnancy due to professional needs¹⁷.

Studies point out that the attempt to reconcile motherhood and a career can cause serious conflicts in working women. On the one hand, women who choose to be mothers suffer social stigma, overload and tend to postpone returning to work. On the other hand, most surveys take into account women's degree of satisfaction with what they do, which is one of the main reasons women return to work after the birth of a child¹⁸.

Many women, in an attempt to seek a specialty that manages to reconcile children, family life, work and studies, make choices in which this balance is more possible, refraining from careers with very long and demanding training, such as surgery¹.

Wage gap

Even in Medicine, men earn more than women. In the lowest salary range, which goes up to BRL 8,000, are 27.9% of women. In this same range, men account for 14.1%, characterizing a gender issue in the medical profession. Young doctors – up to 35 years old – make up the group that receives the lowest salaries: 31.9% earn BRL 8,000 or less per month. 19 The wage gap between men and women is still a fact in all western countries.

For the more developed countries, this difference remains around 30%. For the developing countries, it reaches 40%.

The burden of motherhood remains of practically exclusive responsibility of the woman, with the responsibilities inherent in “constituting a family” being the responsibility of both parents, with the male figure also having to receive inherent privileges consistent with fatherhood²⁰.

According to article 461 of the Consolidation of Labor Laws (CLT), when there is an identity of function, all work of equal value must be remunerated equally, with no gender distinction, however, it is difficult to observe the effectiveness of this guarantee on the part of the jurisprudence²⁰.

It is notorious how the professional path of women differs, and a lot, from that of men, being possible to see its reflections in working conditions, salary differences and domestic responsibilities, which are countless and most of the time exclusive to women.

In addition, there is their formal employment and care that directly impact their entry and permanence in the labor market. Even in the current scenario of the capitalist world, feminist empowering movements and the Social Security Law being the expression of the principle of solidarity that seeks to correct social inequalities, the average amount of benefit for women continues to be lower than the average amount paid to male workers²⁰.

The best way to combat discrimination is to prevent it from occurring by eliminating its causes²¹. Thus, women in medicine, by opting for male-dominated specialties, are producing transformations within medical society that face resistance processes within medical training organizations and society in general²².

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● CONCLUSION

Androcentrism, inferiority and the devaluation of women are present in the wage and functional disparities between men and women and reflect the segregation within the medical profession. Changing the present scenario requires the creation of public policies and reflection of teaching institutions and medical services regarding their respective roles in reducing disparities between genders within the profession.

One way to reinforce the need for social change is to broaden this discussion, still in the undergraduate environment and as part of medical education, of the sociological issues that involve the processes of choosing a medical specialization, in order to offer more support to academics when they become egress.

In addition, the analysis of medical professionals' discourses is a viable path for a bioethical reflection that considers human, relational and affective values as, supposedly “feminine”, and technical, scientific and rational values, which would be “masculine”.

The numerical feminization, also called feminization of a profession, although it does not fail to signify the undeniable achievements of women in the world of work, it only indicates the reduction of the exclusion of one sex in relation to the other, but it is not synonymous with social equality.

The gender discrepancy that surrounded medicine for centuries is broken. However, there is still an urgent need to seek to understand the factors that distance women from certain specialties, in order to create mechanisms that correct the poor distribution of professionals.

Finally, it is imperative that medical schools reflect on the need to adapt to the profile of the medical profession in terms of feminization, transposing entrenched sexist values that reinforce the horizontal and vertical segregation of medicine.

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Resumo

Objetivo: Analisar as dificuldades e facilidades das mulheres médicas e egressas do curso de medicina da Escola Superior de Ciências da Santa Casa de Misericórdia de Vitória (EMESCAM) na inserção no mercado de trabalho.

Métodos: Estudo analítico de cunho exploratório e natureza qualitativa que busca elucidar e conhecer a feminização da profissão médica, como um complexo processo de constituição da subjetividade que engloba a inserção da mulher no mercado de trabalho. Foi enviado um questionário online para o e-mail de 2.510 egressos da EMESCAM que concluíram a graduação no período entre 1981 a 2015.

Resultados: Dos 319 questionários respondidos, 152 (47,64%) foram respondidas por mulheres, mas das 319 respostas obtidas 289 foram consideradas válidas para a caracterização da especialidade médica descritas em ordem alfabética. Pode-se destacar a área de endocrinologia, em que 100% dos atuantes analisados no questionário são do sexo feminino. Ademais, nota-se a predominância feminina em Dermatologia (80%), Pediatria (78,9%), Neurologia (66,7%) e Ginecologia e Obstetrícia (59,1%). Em contrapartida, o sexo feminino foi menos frequente em Cirurgia Geral (26,1%) e demais especialidades avaliadas. Também foi informado dificuldades como “ser mãe”, “ser mulher”, “ser mulher cirurgiã”.

Conclusão: Esse artigo coloca em evidência algumas reflexões acerca do quão real foi essa feminização, e aponta como horizonte um maior número de mulheres nas escolas médicas, porém tendo que lidar com um mercado de trabalho em que homens ainda recebem salários maiores e ainda predominam em especialidades tidas como masculinas.

Palavras-chave: Feminização; Educação Médica; Mulheres; Capacitação Profissional.

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