

# The Role of Gender in Technology Acceptance for Medical Education

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## INTRODUCTION

The history of women in Medicine dates to 3500 before common era (BCE). During a lot of years, women were actively discouraged from the practice of surgery (Wirtzfeld, 2009). Regulations for the practice of surgery were widely recognized and often barred women. For example, in 1313, women were not allowed to practice of surgery in Paris unless examined by a competent jury (Lipinska, 1930). However, women continued to practice without formal training or recognition for the next several centuries (Wirtzfeld, 2009).

A lot of years after that, woman started to rebel and wanted to have a formal training and have the opportunity for studying medicine. In 1847, Harriet Hunt was the first woman to apply to Harvard Medical School and her request was rejected (“A profile and history of Women in Medicine”, 2013).

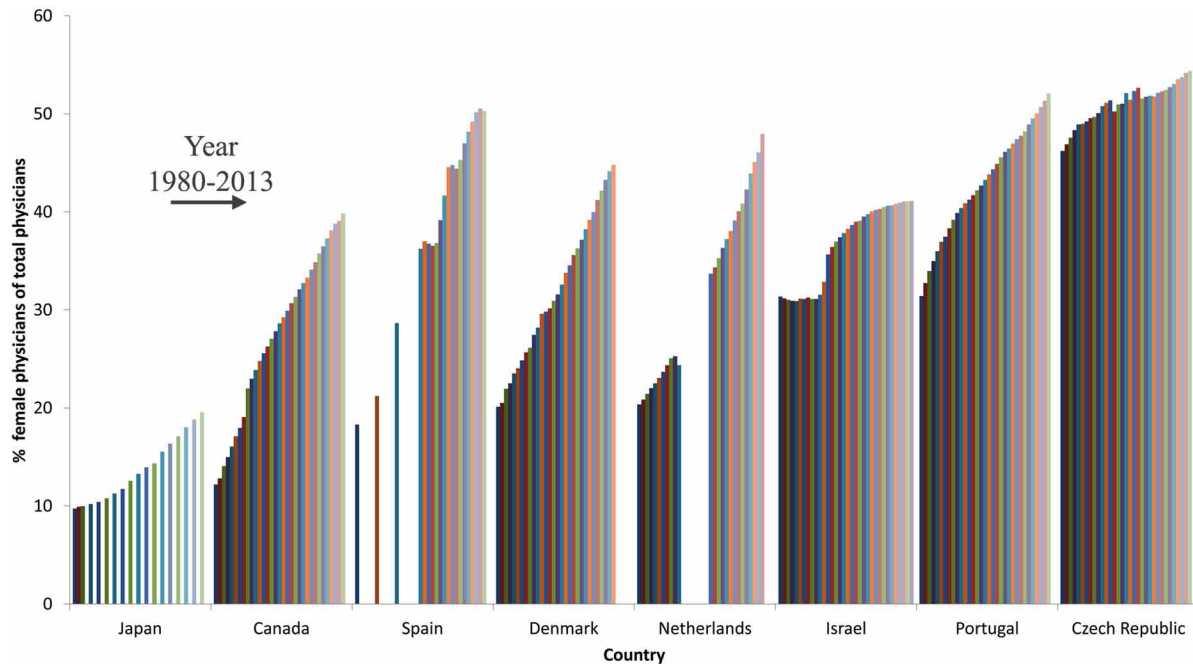
However, Elizabeth Blackwell was the first women in America to receive her medical degree (1849). She decided to be a doctor when a close friend who was dying suggested she would have been spared her worst suffering if her physician had been a woman (“Changing the Face of Medicine | Dr. Elizabeth Blackwell”, n.d.). She applied to several Schools of Medicine but all of them rejected her request. There was a medical school, Geneva Medical College that decided not assume the sole responsibility for denying the request, so to justify their own decision, they asked the students thinking they would reject the proposal. On the contrary, the students themselves voted “yes”, so Elizabeth was accepted to study medicine (Morantz-Sanchez, 2000). There were other women that were considered the first woman in their countries as Emily Jennings Stowe in Canada (Hacker, 1984) who graduated in 1867 or Dr. Aleu, the first Spanish woman who became a doctor in 1882 (López, 2007). In all those cases, it took them a great effort to become a physician and they were harshly criticized by the society. However, they achieved their goals and it was the beginning of a new hope for women.

Until 1970, women still were underrepresented considerably in the medical profession. Just fewer than 8% of US physicians were female. (A profile and history of Women in Medicine, 2013). However, this proportion was increasing steadily for the upcoming years as it is shown in Figure 1. This chart shows the percentage of female physicians since 1980 until 2013 for each country and it reveals that there has been a marked increase of the percentage each year reaching almost 50% in most part of the cases.

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*Figure 1. Percentage of female physicians in different countries*

Source: Data obtained from OECD.StatExtracts Health Care Resources: Physicians by age and gender.



The woman incorporation into the workforce has encouraged the growth of number of woman in professions that used to be predominantly occupied by men. This culture change has impacted on Society, breaking the traditional rules imposed by them. Not only that, the woman are more employed in qualified jobs, opting for studying Social and HealthCare Sciences careers, whereas men are choosing to study more technical careers which it means a detriment to the other ones. This tendency is still growing, so for the last years, the students that signed up in Medical Schools are women in their majority. Approximately, since 1998, the proportion of female new students in Medical Schools in Spain is roughly 65%-71% (Estadística de Enseñanza Universitaria, 1998 a 2011).

In the EU7, the proportion of female physicians has increased between 1996 and 2006 in almost all Member States (41% of female physicians in 2006 compared with 35% in 1996) (Eurostat, 2009). According to Pololi (2010), the main reasons that they gave when they were asked were “they have loved Science in High School and College and wanted to use it to help people”. Those figures reveal that women clearly impacted on Society, breaking the rules established by them and even defying them

On the other hand, the development of new technologies and its impact on Society are forcing changes on different sectors as Health and educational Area. According to Merriam-Webster, technology could be defined as “the use of science in industry, engineering etc to invent useful things or to solve problems”. This is a general definition, but Merriam-Webster also considers technology as “the practical application of knowledge especially in a particular area” or “a manner of accomplishing a task especially using technical processes, methods, or knowledge”. Burgelman, Christensen & Wheelwright, (2008) refers technology to “the theoretical and practical knowledge, skills and artefacts that can be used to develop products and services as well as their production and delivery systems”. Other authors, as Pellisier (2008) does not consider technology as machines, but also as a concept related with human beings. This definition agreed with Simon (cited in Pellisier, 2008) that states that technology is “knowledge that is

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