



Women in nuclear medicine

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Published online: 25 May 2021

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Time is flying, but despite the increased number of women physicians in healthcare, the experiences and challenges faced by these women have not evolved during the past 50 years. In the last period, a lot of technological changes and, also, artificial intelligence have become of great support to clinicians; however, the daily pressures of being a healthcare worker is still non-negligible. Choosing a career in medicine has a significant impact on a person's life, independently from the type of specialization. A career in nuclear medicine gives us excellent and unique methods of patient management. During our clinical endeavours, radionuclides are the way we use nuclear power to treat patients. Furthermore, the employment of radioactivity as theragnostic requires careful procedures. Despite all the current and future challenges, inequality and a lack of gender diversity still exist in medicine, especially in academia and leadership.

The number of women choosing medical careers is continuously growing, from 6% in 1960, 29% in 1990, 38% in 2000, up to approximately 46% of all physicians in 2015, with the huge variation across countries [1, 2].

Although companies enforce regulations for hiring female employees, there is still debate in hospitals and medical institutions. The inequality in academia combined with special conditions, such as child-bearing and child-rearing, is the main issues women face in their careers in general medicine and, specifically, nuclear medicine. Gender is always considered before hiring a person in a department, either as a

physician, technician, or physicist. Apart from that, even though departments hire female health workers, we know the working conditions might not be equal, yet another topic of debate [3]. This situation creates competition between the candidates, which can, in turn, become another issue to discuss.

One study emphasized that the gender differences in the academic sphere of nuclear medicine specialists weighed against women in the USA and Canada. Moghimi et al. showed that women in nuclear medicine have been less represented in the academic arena and leadership [4]. Grimm et al. proposed conducting more mentorship programmes for young women in radiology [5] to reduce university and leadership position inequalities. Notably, gender diversity supports creativity and the ability to work more proactively in departments [6].

Gender inequality issues gained more attention in recent years, and the need for action in nuclear medicine and radiology becomes unavoidable. The International Atomic Energy Agency (IAEA) started a relevant initiative, creating the Marie Curie Fellowship Programme for women who want to pursue an education in nuclear medicine, either in fellowship or master's programmes [7]. Initiatives such as EANM Women Empowerment (EANM WE), promoting mentorship and networking, represent crucial support for women in clinical, research, and leadership positions. However, women embracing these initiatives will face numerous challenges, for instance, difficulties in breaking the current routines, lifestyle changes including harmonization of family life with new responsibilities and learning how to be a leader in the men world.

In all these circumstances, we should once again question how to support women in nuclear medicine. Nuclear medicine departments should be encouraged to maintain a balanced working environment. We have to make an effort to organize one-on-one international mentorship programmes for free. Online platforms can facilitate reaching all women in nuclear medicine to support more leadership and academic programmes to help them pursue their future careers. The cooperative steps of politics, associations, and universities will ensure a sustainable way forward, enabling numerous

This article is part of the Topical Collection on Editorial

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talented women in nuclear medicine to achieve their full potential.

Author's contributions All authors' drafted manuscript. All authors have read and approved the submission.

Declarations

Ethics approval Institutional Review Board approval was not required because the paper is an Editorial.

Informed consent Not applicable.

Conflict of interest The authors declare no competing interests.

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