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## ABSTRACT

**Introduction.** Sofia Ionescu-Ogrezeanu (b. April 25, 1920, Fălticeni - d. March 21, 2008, Bucharest), also known as the Lady of Romanian Neurosurgery, became the first woman neurosurgeon in the world after performing a brain surgery during World War II, a fact recognized as a world premiere during the 13th World Congress of the World Federation of Neurosurgical Societies (WFNS) in Morocco, in 2005. [1]

**Materials and methods.** Sofia Ionescu is the first woman neurosurgeon. She was born on the fields of Bucovina, in Fălticeni, and became part of the "golden team" of the Romanian neurosurgery of the pioneering period. The decisive moment of her career took place in 1944, during the war when she was forced to perform an emergency operation on a child, a victim of the bombing.

The article coagulates the reports regarding the description of the first brain surgery performed by the first woman neurosurgeon with the continuous activity integrated with the field of neurosurgery. Both specialized articles, biographical books, and television interviews were used as references.

**Results.** The operation performed in the fifth year of faculty was the first step of a journey of 47 years of neurosurgical career, practised with high morality and devotion. The sacrifice of the pioneer of the first woman neurosurgeon was recognized in the press in the country and abroad, as well as by the recognition of different titles and distinctions.

## Keywords

Neurosurgeon Sofia Ionescu  
(Ogrezeanu),  
first brain surgery 1944,  
first woman neurosurgeon,  
neurosurgical history



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## INTRODUCTION

Dr. Sofia Ionescu's professional career reveals the secret of the art of reversing the meaning of obstacles; according to the idea advocated by Marcus Aurelius, year 170: "The impediment to action advances action. What stands in the way becomes the way." Thus, she performed her integrated neurosurgical activity during 47 years, in the socio-political context of the Second World War. She was part of the team that made the pioneering sacrifice in the Romanian neurosurgery, also called the "gold team"; together with Prof. Dr. Dimitrie Bagdasar, the founder of the neurosurgical specialty in Romania, formed by Prof. Dr. Harvey Williams Cushing in Boston, Dr. Constantin Arseni and Dr. Ionel Ionescu, who later became her husband and together they had two children [2],[3].

## MATERIALS AND METHODS

In Dr. Sofia Ionescu we discover a personality who practices great virtues, such as: *courage* - to be the first woman neurosurgeon in Romania and internationally renowned; *reason* - to constantly perform the balance exercise in affective gymnastics and to practice for the first time in 1944, in the fifth year of study at the Faculty of Medicine, the drill procedure, in order to save the life of a boy in a coma, the victim of the bombings of World War II; *ingenuity and creativity* - to use in 1968 a sterile urinary well for external ventricular drainage, subsequently standardized procedure; *compassion* - to the fellow patients, who she gave pieces of soul and days of their lives; *humility* - to offer the sacrifice of her own existence in order to perpetuate neurosurgery as a specialty in Romania, fulfilling the last wish of Prof. Dr. Dumitru Bagdasar. [4]

About her first brain operation, which enrolled her in the history of world neurosurgery, she speaks in an interview with Eugenia Vodă, within the program "Professionals" of the Romanian Television 1 (TVR1) in 2000, reporting: *"This operation decided life for 47 years ahead, while I was in neurosurgery, and brought me to 180 degrees compared to what I had planned, a quiet life as an internist in my hometown, Fălticeni. Because at some point it was necessary to perform an emergency operation on a child after a bombing and he had no one to do it. Dr. Bagdasar had a suppuration in his hand, the other two secondary doctors, Dr. Arseni and Dr. Ionescu, each had a similar impediment to enter the operation, and the child was*

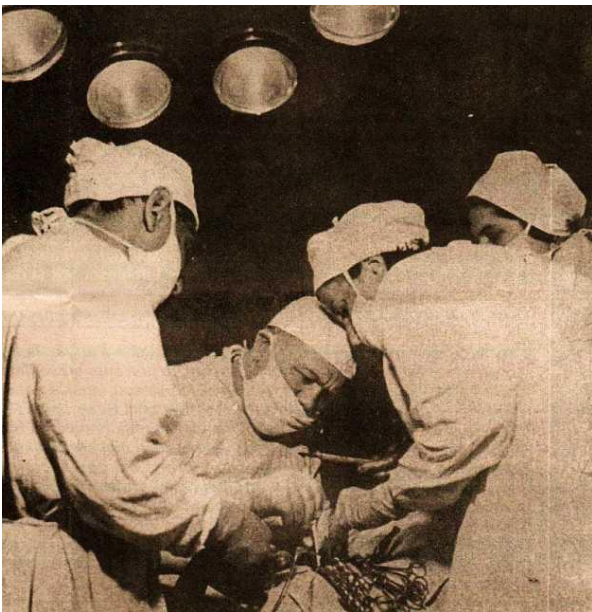
*actually dying in front of us. And then Bagdasar, who was very impressed, said. Who can do this?" He asked the intern who was a neurologist. And he said "No. No way." shaking his head. And then he asked me, too, and I agreed. Although, in my mind, I thought "If he watches me operating, my hand will be shaking and he will look at me curiously", as it was the first neurosurgery operation. Dr. Bagdasar, at the end of the operation, told me "Miss, you have the necessary skills. Please stay with us".*



**Figure 1.** Dr. Sofia Ionescu during surgery.

Also, in the biographical book "Neodina binelui - Neurosurgeon Sofia Ionescu", written by Rodica Simionescu, published in 1998, at Alas Publishing House, Călărași, there is a chapter that sets out the steps of initiating the operations in neurosurgery, fragments: *"The year 1944. Among the wounded emergency patients in the hospital at the neurosurgery department, a little boy is brought into a coma. Dr. Bagdasar consults him and decides that the child should be operated on immediately. The only valid persons were the intern Sofia OGREZEANU and the intern Constantin CREȚAN. If they do not intervene urgently, the child dies in front of them. Who can do a tripod? She defeats her chosen spirit, professional conscience and, of course, courage and states that she wants to operate. She operated safely and quickly as if she had been doing this for ever. She was operating on a child. She was*

*performing brain surgery. No woman had done this before. She went into the operation with only one thought: to save the child. Extraordinary peace, perfect peace and clarity have seized her soul. Perfect concentration. Her mind works without any emotion. Everything is just calm and precision. That's how it was. That's how she always operated. Professor Bagdasar, dr. Ionel Ionescu, the staff of the operating room followed her breathlessly. She succeeded. Dr. Bagdasar immediately noticed that she had the skills and asks her to stay in neurosurgery. Thus, Prof. D. Bagdasar baptized an exceptional physician, blessed a name that would remain in the history of Romanian medicine in the honor gallery."* [5]



**Figure 2.** "The Golden Team" during brain surgery.

Prof. Dr. Sebastian Nicolau, Head of the Oncopediatrics Section at Fundeni Hospital, referred to the worldwide validation of the operation performed by Dr. Sofia Ionescu, in the article "Dr. Sofia Ionescu - Primum Inter Pares - the first woman neurosurgeon in Romania", published in the *Reperul iatro-istoric J.M.B* magazine: *"The undeniable truth has been brought to light after long iatrics-historical research of over 30 years, on September 17, 2005, at the World Congress of Neurosurgery in Morocco (Marrakesh), which confirmed that Dr. Sofia Ionescu is the first woman neurosurgeon in the world. Until then, it was believed that Dr. Eisenhardt from the U.S.A. holds this title of honor, but it has been proven that the one who practiced medicine in the first decades of the*

*twentieth century was an anatomopathologist and not a neurosurgeon."*[6].

In the specialized literature, in the article entitled "Sofia Ionescu, the First Woman Neurosurgeon in the World", published in the journal "World Neurosurgery" in March, 2013, it is also mentioned the place occupied by Dr. Sofia Ionescu internationally: *"The nomination as first woman neurosurgeon took place in Marrakech during the 2005 WFNS Congress. Despite the fact that some claim Mrs. Diana Beck to be the first woman neurosurgeon in the World, our theory suggests otherwise. While the first documented surgical intervention performed by Mrs. Diana Beck dates since 1952, Mrs Sofia Ionescu operated for the first time on a human brain as early as 1944. Furthermore, Mrs. Diana Beck's actions surfaced in the World in the year 1947, long after the war had ended and Sofia Ionescu became a neurosurgeon. Last but not least, during the Second World War Mrs. Diana Beck had occupied the position of consultant for neurosurgery and not a fully entitled neurosurgeon."*[1]

The years that followed the early initiation into the mysteries of neurosurgery were devoted entirely to the perpetuation of this specialty at the beginning, the work of Dr. Sofia Ionescu being recognized in 1943 by the Sign of Distinction of the Red Cross. In 1972 she received the Medal for the proclamation of the Republic (25 years) decree no. 480, and in 1996 the Diploma of Honor A.N.F.D.U.R. for exceptional merits. In the General Assembly of the Academy of Medical Sciences she was elected HONORED MEMBER of the Academy, the Ing. Elisa Leonida Zamfirescu Award and the diploma of honor were offered by the National Confederation of Women in Romania for outstanding merits in promoting Romanian science and technology and everything else. In the same year, 1996, she became a Member of the Romanian Society for the History of Medicine. [7],[8].

The intraoperative effort has been doubled by the publication of scientific papers in journals in the country and abroad, such as *Acta Chirurgica Belgica* 1958, *Journal de Chirurgie* 1958, *Psychiatry, Neurology, Neurosurgery* 1960 Amsterdam, *Wiener Klinische Wochenschrift* 1962, *Journal of Neurosurgery* 1967, *Rev. Roumaine de Neurosurgery* 1970, *Neurosurgery Stuttgart* 1970 and others, in a total of over 120 articles. Also, Dr. Sofia Ionescu is recognized in the national and foreign press as the first woman neurosurgeon.[9]





**Figure 3.** Dr Sofia Ionescu, The Lady of Neurosurgery.

### CONCLUSION

At the World Congress of Neurosurgery in Morocco, Marrakech it was confirmed that Dr. Sofia Ionescu is the first woman neurosurgeon in the world.[10]

The life model of the Lady of International Neurosurgery, can be regarded as a true *guide of Life Coaching* through the objective judgment, the altruistic action and the power of acceptance that it manifests. The stories coagulated in the book illustrate the art of relentless zeal and ingenuity

### CONFLICTS OF INTEREST

The authors declare that the article content was composed in the absence of any commercial or financial relationships that could be construed as potential conflict of interest.

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