

## Functional Neurosurgery in Nepal. Where do we stand?

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Functional neurosurgery, encompassing procedures aimed at restoring neurological function, has seen notable advancements in Nepal over recent years. This subspecialty addresses conditions such as epilepsy, movement disorders, and chronic pain, offering patients improved quality of life through surgical interventions.

Historically, neurosurgical services in Nepal were limited, with the first practice established in 1961. The growth in trained neurosurgeons has been significant, increasing from a single practitioner in 1989 to 116 by the end of 2022. This development has facilitated the expansion of subspecialties, including functional neurosurgery.<sup>1</sup>

Few institutions in Nepal have begun the sub-specialty of functional neurosurgery in Nepal. This has been detrimental in treating patients with resistant epilepsy and severe pain management. Among them, Annapurna Neurological Institute and Allied Sciences (ANIAS) plays a pivotal role. Annapurna Neurological Institute and Allied Sciences (ANIAS) in Kathmandu has also contributed significantly. Established in 2009, ANIAS provides specialized neurosurgical care, including functional neurosurgery, epilepsy surgery, and treatment for movement disorders. With a team of ten neurosurgeons specializing in various aspects, the institute offers modern neurosurgical interventions and has been recognized as a training center, offering fellowships to young neurosurgeons from developing and developed countries.<sup>2</sup>

The Functional Workshop and 5th Nepal Japan Neurosurgical Conference, held from March 20–22, 2025, in Kathmandu, was a collaborative event by NFN, Tokyo Women's Medical University, NESON, and ANIAS. Focusing on movement disorders, epilepsy, and psychiatry, the conference emphasized knowledge exchange and skill development. Its highlight, the Functional Workshop, enabled hands-on learning and global collaboration, aiming to enhance neurosurgical care and foster innovation through international partnership.<sup>3</sup>

Despite these advancements, challenges persist. The distribution of neurosurgical services remains uneven, with a concentration in urban centers like Kathmandu, leaving rural areas underserved. Additionally, the absence of formal subspecialty training programs within Nepal has led many aspiring neurosurgeons to seek education abroad. However, there is a growing trend of young neurosurgeons pursuing subspecialty training

in areas such as functional neurosurgery, indicating a positive shift towards the development of specialized services within the country.<sup>4</sup> In addition to this, only 10 accredited training programs in Neurosurgery in Nepal is another challenge.<sup>5</sup>

In conclusion, functional neurosurgery in Nepal has made significant strides, driven by the dedication of medical professionals and the adoption of advanced technologies. While challenges remain, the ongoing commitment to education, training, and equitable distribution of services holds promise for the future of neurosurgical care in Nepal.

## REFERENCES

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