Research in Neurosurgery
Introductory Lecture
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By

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With 2 Figures

Mr. President, Members of the European Board, Ladies and Gentlemen.

I feel very honoured by having been invited to make this introduction to a topic which surely many of us would consider important.

However, many politicians and hospital administrators in Scandinavia feel otherwise; usually they consider research in neurosurgery to be a big white elephant! Their feelings bring to memory an old Scandinavian story, which also concerns this noble animal.

A distinguished group of international scholars had a meeting where everybody was to present a research study on the elephant. The German professor brought with him a work in twelve solid volumes entitled: "A short introduction to the history of the elephant—dedicated to my beloved wife." The British scientist had with him a tiny book on the subject "Elephant hunting". The French professor brought a seductive piece in red leather entitled "L'Elephant et son amour", while the Danish contribution was a cookery-book: "The Elephant in 100 ways." The American essay was a constructive one: "How to make the elephant bigger and better", while the Norwegian contribution was laconic and modest, namely: "Norway and the Norwegians!"

For my following comments on Research in Neurosurgery I apologize in advance for any Scandinavian bias, and I have tried my best to make my considerations Europeanly valid. To achieve this I have adopted some of the European elephant essay titles in my layout, as follows:
I. The Present State of European Neurosurgical Research. ("Eine kurze Einführung . . .").

II. Negative Trends. ("L'amour qui passe . . .")

III. Why Research? ("Breed the elephant—or buy it?")

IV. The Future Neurosurgeon. ("Hunter or hunted?")

V. "How to Make the Elephant Bigger and Better."

I. The Present State of Neurosurgical Research

The quantitative trends are readily seen if we consider the informational output in neurosurgical journals as retrieved in the Index Medicus during the latest decade (see Fig. 1). From 1968 to 1979 there is a certain increase in the number of journals, but the increase is far from dramatic. It is definitely less pronounced than the increase in the number of neuroscience journals, which during 10 years have increased by as much as 30%. If we look at the informational quantity of some European journals of neurosurgery we see the same trend (Fig. 2): the volume of research published per year remains fairly constant during the latest decade. An interesting contrast is the Journal of Neurosurgery, the weight of which has increased almost 100%. A similar trend is seen when we consider the number of papers appearing in the same journals.

If we turn to the qualitative side one is impressed by substantial advances in several fields.

1. New Diagnostic Methods

In the first place new diagnostic tools have emerged, mainly through improvement in radiological methods. The rapid progress in computer tomography, emission scanning, and scintiscanning as well