

STUTTERING RESEARCH AGENDA

A major barrier to significantly improving the lives of the 1% of people who stutter (more than 3,000,000 in the U.S. alone) is the shortage of funding for high-quality, independent research. Government sources of funding are inadequate for supporting an appropriate level of academic research on the causes and potential treatment approaches for stuttering. The NSA is committed to developing a substantial, independent research fund to support needed research and to increase research funding from the federal government and other sources. Recent studies have shown that there is hope for people who stutter. With appropriate funding, we can work to significantly reduce the impact of stuttering on the lives of those who stutter.

Research is needed on two fronts: identifying the cause of stuttering and evaluating treatment approaches that mitigate or eliminate its impact. Examples of the type of research NSA wishes to fund are:

Early Childhood Stuttering

Approximately 5% (or more) of children stutter at some point in their development. Only 20-25% of those children continue to stutter into adulthood, but those who do are at risk for developing adverse impact that can significantly reduce their quality of life. Research to identify those who will continue to stutter is important for the development of better assessment protocols to identify children who should start therapy at a younger age. A key research focus will be to elucidate why some children recover and others do not. Identification of this process may lead to treatments targeted specifically at preventing chronic stuttering.

Treatment Outcomes Research

Several approaches to stuttering therapy have been developed by different clinicians over the years, and no one approach has been demonstrated uniformly effective in any age group. It is likely that a combination of approaches will be most effective, but research to evaluate this presumption on a large population of stutterers has not been completed with valid statistical controls that support the development of a “best practices” approach. While better treatment approaches may not completely eliminate stuttering in the affected population, they will certainly mitigate the impact it has on speaker’s communication and quality of life.

Fundamental Neurological and Genetics Research

Recent research has shown distinct differences in brain activity and neural structure in people who stutter. Put simply, the brains of people who stutter are different from the brains of people who do not stutter. Moreover, specific genetic markers have been identified in family groups with a history of stuttering. This research offers hope for developing a better understanding of the underlying neural mechanisms of language formulation and speech production that have been disrupted in people who stutter. Such research is expensive, but it holds significant promise for uncovering aspects of development that may contribute to stuttering. Specific genetic and neuro-imaging markers could help to identify sub-types of stuttering leading to specific, targeted, personalized treatment approaches.

Pharmacological Intervention

Research has shown that the difficulty underlying stuttering can be found in the brain involving the transmission of signaling from language planning to speech production. This suggests that a pharmacological intervention may be possible for many individuals, either alone or in conjunction with speech therapy. This approach has not been extensively studied with only one compound ever being investigated in a FDA registration trial. Some promising leads exist, and further work would likely be beneficial and may draw interest from pharmaceutical and biotech companies to fund larger clinical trials. The end result could be an FDA approved treatment for stuttering.

The NSA seeks to provide sufficient seed funding to support research that will stimulate increased funding from the government for research labs that address these key aspects of the disorder. We further wish to encourage advanced training in universities and clinical settings to set the stage for major strides forward in advancing our understanding of this condition – and ultimately eliminating its effects on people’s lives.