

# The impact of idiopathic Sudden Sensorineural Hearing Loss on patients' Quality of Life

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## INTRODUCTION

Sudden sensorineural hearing loss (SSNHL) is defined as a sudden loss of hearing (30dB or more) affecting 3 or more contiguous audiometric frequencies occurring over 72 hours <sup>1</sup>.

The impact of SSNHL on patients' Quality of Life (QoL) has been somewhat researched, however, the complexity of this condition and the lack of uniformity for treatments provided do not allow to have clear estimates <sup>2 3 4</sup>.

### Aims of this research project:

1. Quantify the impact of SSNHL
2. Investigate whether there is a change in QoL detected between two NHS appointments

## METHODS

This project is embedded in the SeaSheL national prospective cohort study (Mandavia et al. 2020) <sup>5</sup>. Patients were recruited from 76 NHS sites in England and Wales.

Participants completed the *Hearing Handicap Inventory for Adults/Elderly* (HHIA/HHIE), depending on their age, and the *Health Utilities Index Mark 3* (HUI-3). Both questionnaires were filled out when they were first seen by the ENT services and at a follow-up date.



Figure 1: Diagram outlining the project methodology

## RESULTS

### HHIA group (<65 years)

At the initial presentation 81% of patients had some level of hearing handicap, and this decreased to 58% at follow-up. The majority (43%) reported significant/severe handicap during the first visit but at follow-up most patients had no hearing handicap (43%).

The change in questionnaire score was found to be statistically significant ( $p < 0.05$ )

### HHIE group (>65 years)

Initially 75% of patients had some level of handicap, and this decreased to 63% at follow-up.

The majority (37,5%) reported either mild or severe handicap during the first visit and at follow-up most patients had severe handicap (44%).

The change in questionnaire score was not statistically significant ( $p > 0.05$ ).

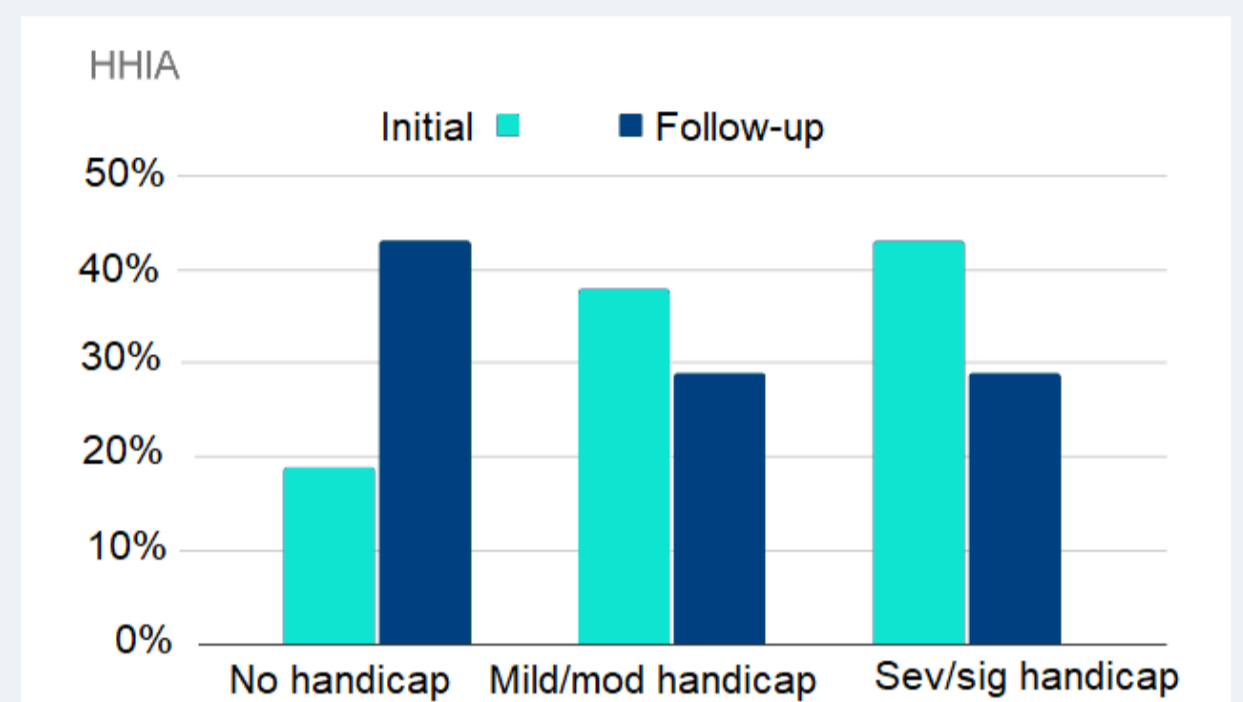


Figure 2: Diagram comparing HHIA scores by handicap categories

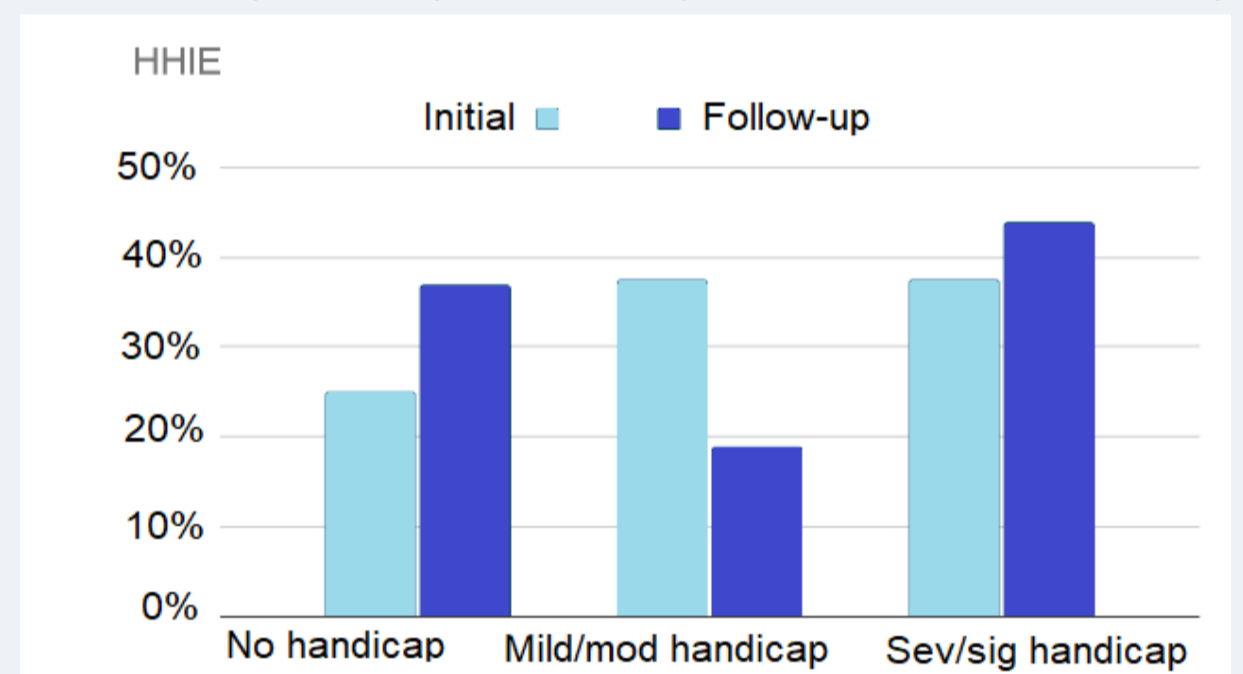


Figure 3: Diagram comparing HHIE scores by handicap categories

### HUI-3

The mean coefficient score increased from 0,73 to 0,86 (range: 0-1) in the two visits. This was found to be statistically significant ( $p < 0.05$ )

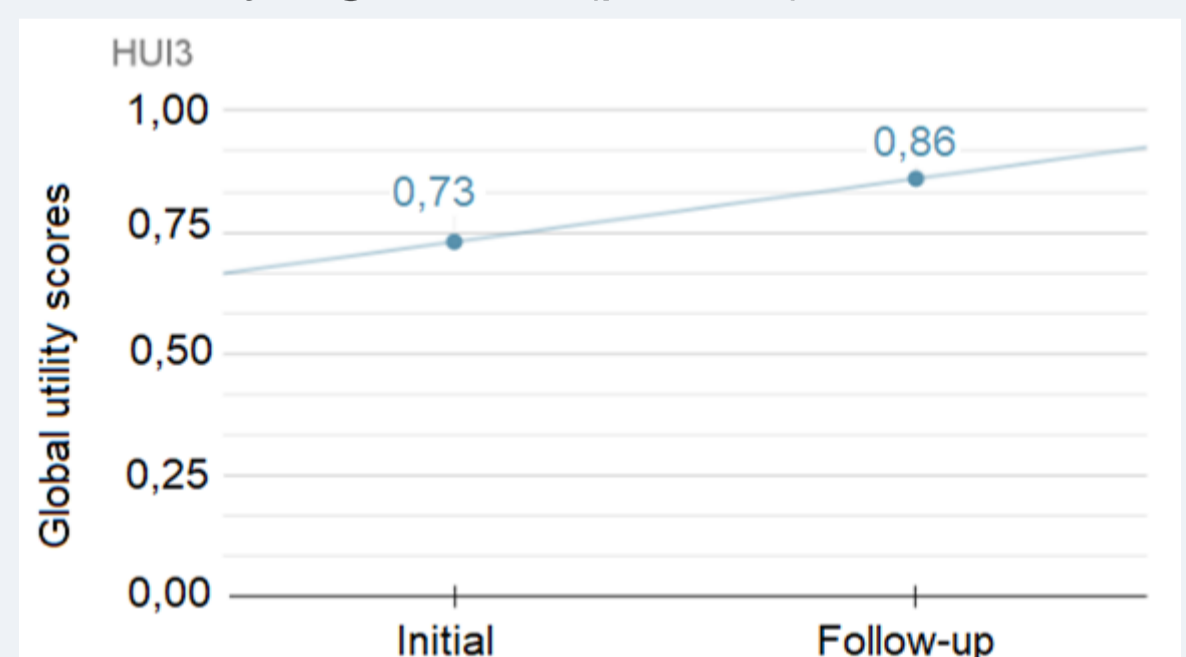


Figure 4: Diagram showing the change of mean score

## CONCLUSIONS

- SSNHL has a negative impact on patients' QoL, in line with similar studies <sup>2 3 4</sup>
- A significant improvement was recorded in patients under 65
- Due to limitations like treatment not included, COVID-19 and small sample size, more research on the topic is required in the future