

## Objectives

The aim is to obtain an overview of the psychosocial and occupational-financial situation of parents of pre-pubertal children with cochlear implants. Caring for a child with a complex hearing condition. Caring for a child with a hearing impairment requires e.g. a daily implementation of therapy modules, as well as regular visits to different therapists. Among other things, this might lead to special situation of parents that should be recognised.

## Methods and Materials

### Sample characteristics

- 97 parents of cochlear implanted children from Hanover, Germany (74 mothers, 23 fathers)
- 91 % are currently living with a partner, 9 % are single parents
- Children's age in years: M= 6.2 (SD = 2.8)
- 74% of children wear bilateral CIs, 25% have an additional disability  
→ first implantation between 0 and 12 years ago (M=4.47, SD= 2.75)

### Questionnaires:

- Patient Health Questionnaire (PHQ-4) [1] to screen for symptoms of depression and anxiety
- Cantril Ladder for life satisfaction (Scale from 0-10) [2]
- Self-constructed items regarding occupation and financial burden (partly based on previous research [3])

## References

- [1] Kroenke, K., Spitzer, R. L., Williams, J. B. & Löwe, B. (2009). An ultra-brief screening scale for anxiety and depression: the PHQ-4. *Psychosomatics*, 50(6), 613-621.
- [2] Cantril, H. (1965). *The pattern of human concerns*. New Brunswick, NJ: Rutgers University Press.
- [3] Spahn, C., Richter, B., Zschocke, I., Löhle, E. & Wirsching, M. (2001). The need for psychosocial support in parents with cochlear implanted children. *International Journal of Pediatric Otorhinolaryngology*, 57, 45-53.
- [4] Wicke, F., S., Krakau, L., Löwe, B., Beutel, M., E. & Brähler, E. (2022). Update of the standardization of the Patient Health Questionnaire-4 (PHQ-4) in the general population. *Journal of Affective Disorders*, 312, 310–314.

## Results

### Symptoms of Depression and Anxiety

20.6% of the parents showed a positive screening result for symptoms of depression and anxiety

### Life Satisfaction

(from 0 - 10):

The average life satisfaction of parents was 7.1 (SD= 1.5)

### Carreer Changes

66 % of the mothers and 50 % of the fathers reported career changes

Professional change	Mothers (%)	Fathers (%)
Gave up work	15	4
Reduction of working hours	36	13
Change in career plans	22	13
Declined a better paid position	7	13
Less / no further qualifications	7	4
Unpaid vacation	7	7

### Additional Expenses (not reimbursed, yearly)

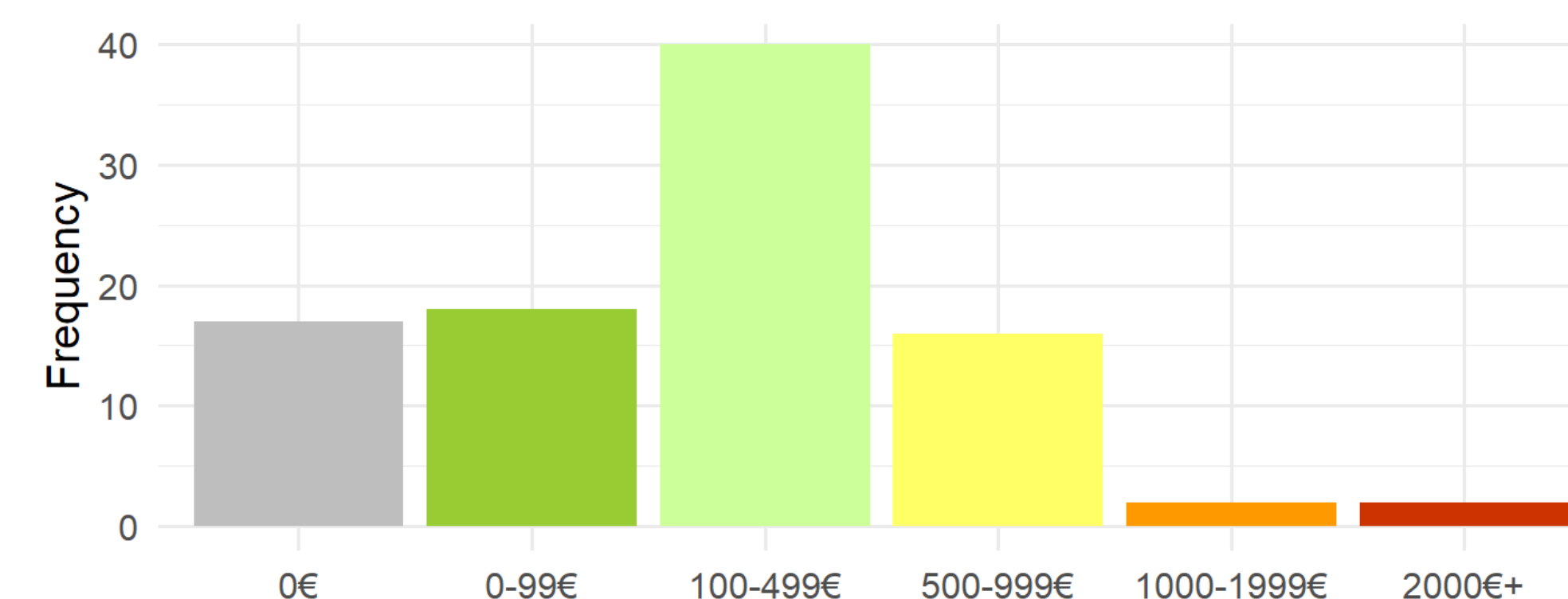


Fig. 1. Additional expenses per year

Table 1. Changes in occupation

## Conclusion

In this German sample, parents of cochlear implanted children experienced a financial burden and partly had to adapt their careers to the condition of their child, despite extensive occupational support measures in this country and health insurance. Also, one in five (20.6%) parents showed symptoms of depression and anxiety, which is more than twice as many as in the norm sample of the general population (8.7%) [4]. Based on this, an education programme to support parents in dealing in with daily challenges within their family is needed.