

## Preference study of a new product line „Soproni’s Peep-N-See House™” supporting the testing of the eyesight of young children. First results

Anna Soproni<sup>1</sup>, Magdolna Fodor<sup>2</sup>, Andrea Szigeti<sup>2</sup>  
Budapest, Hungary

1. Private doctor's office
2. Semmelweis University, Faculty of Medicine, Department of Ophthalmology

## Purpose

- Presentation of a new protected product line (Soproni’s Peep-n-See House™) for the early visual examinations of young children. (Accessories: a mask as an occluder, a device replacing the trial frame, mask with fix lens(es), test goggles, a home kit for visual testing)
- To report on a patient preference with my occluder

## Introduction

- Difficulties during the eye examination of small children:
  - They are afraid and are anxious in a strange, unknown milieu
  - They are afraid of the medical devices, especially of those which cover their eyes
- I designed devices which I assume to make children more inclined to take a vision test, as their design causes less distress, than that of the traditional ones during completing a VA examination.
- For this reason we tested which of the devices children prefer.

## Materials and Methods.

### The disposable mask as an occluder for examination of visual acuity (VA)



#### Advantages of the mask:

1. It creates a playful situation that turns the tests into a game, thus motivating children to undergo the procedure.
2. can cover the eye properly
3. may be used as promotion material for sponsoring firms that adopt our early screening test programs.



Sometimes you don't need to hold it at all.

## Monocular examination of VA in latent nystagmus



## The disposable mask as a present to the child after the examination



It may be a substitute for the patching test for the estimation of the ductions, during the examination of the fixation preference or the fixation pattern



Infantile ET



After one month of alternating patching the diagnosis is: bilateral pseudoparesis of the LR OU

The kit with disposable mask and optotyp cards to the parents for home visual control. It may prepare the young patients for examinations in the office



**Plastic devices.**

Mask as a trial frame with one window to control the monocular correction



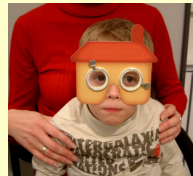
The trial lenses are fixed – in the front and in the back – by adhesive rubber rings\*

\* Trusetal Verbandst. I have no financial interest in it

Mask as a trial frame with two windows



**Binocular examinations with refractions** (in the cases of latent nystagmus by penalisation)



The weight of the device with 4 rubber rings is only: 19g

Sometimes you do not need to hold the device at all.

**Mask with fix lenses**

**With one window**

1. for screening (after 6 yo): -0,5D

2. in strabismus cases:

+3,0 or -3,0D for monocular examination (PlusOptix\*) to wide the measuring area



**With two windows:** +3,0D or -3,0D

1. During refractive examination: to reduce the accommodation

2. To examine the relation of the accommodation/convergence

\* I have no financial interest in it

The devices with filters, Bagolini lenses etc.



### Patient's preference. Tools and methods

- During VA examinations children with proper age may take their own decision
  - preference of two groups of new patients for selection of the covering methods was investigated
  - by changing the order of the questions (sheet of paper or mask vs. mask or sheet of paper)
  - The hypothesis was that children will prefer the mask independently of the order of the question

### Patient preference. Results

#### 1. Mask or sheet of paper?

**33 patients**, average 4,7 yo (2,5-8), boys/girls=21/12  
Answer: Mask/sheet of paper = **27 / 6** (2 boys, 4 girls, average: 5,3 yo) **81,2% chose the mask**

#### 2. Sheet of paper or mask?

**33 patients**, average 5,4 yo (3-11), boys/girls=17/16  
Answer: Mask/sheet of paper = **25 / 8** (7 boys, 1 girls, average: 4,5 yo) **75,8% chose the mask**

### Patient preference. Conclusion

A majority of the both groups chose the mask.

Their preference seems independent of the order of the questions.

### Summary

- If we can verify the good vision of the child in a subjective way during the screening (by visus and binocular eye exams), some other methods (cycloplegia, fixation etc.) causing eventual reluctance in the child or the parents may be avoided.
- Knowing the concrete visual value, parents could be convinced easier of the necessity of treatment
- We assume, that the method of completing the VA examination will influence its success
- We examined the „reception” of the occluder as a part of the Peep-n-See House product line. It has been found that a majority of the children chose the mask instead of the traditional method for VA examination
- We assume that using the „child friendly” mask instead of the traditional covering method the subjective visual testing may be more successful and will cause less distress to the child. We shall perform further examinations later to clarify this and to find out whether the duration of the VA examination will be reduced.

### Reminder

- The Peep-N-See House is protected as an ophthalmic device by the Community Design Law in the European Community for twenty-five years (Community Design No: 001094437-0001/0002), and a design patent application arising from that application has also been filed in the United States. Since the device may have alternative shapes rather than a house and it may also have different technical features a utility patent application was filed as well, being extended continuously to above and other countries of the world. Therefore, copying, selling or using this and similar devices is a subject to my consent.

• [www.lat-lak.com](http://www.lat-lak.com)

• [sopronia@t-online.hu](mailto:sopronia@t-online.hu)

