

awareness of the importance of sleep and how to develop healthy sleep habits would be beneficial in this population.

## REFERENCES

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P025

## EMBEDDING PAEDIATRIC PPIE IN NON-INVASIVE VENTILATION INTERFACE DESIGN

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**Introduction** Non-invasive ventilation (NIV) masks that fit well are difficult to find for children who are small or have atypical facial features. Poorly fitted masks create problems e.g. discomfort, non-adherence and facial deformity. Our project aims to design and produce masks that fit well. Children's voices are vital, but not often heard, in respiratory research projects.

Integral to the research, we aimed to construct a patient and public involvement and engagement (PPIE) program designed to:

1. Understand the problems children and families experience with NIV and establish their wants and needs
2. Provide an inclusive and creative environment for non-constrained thinking
3. Get actionable feedback and ideas for improvements from a diverse patient group

**Method** We created a method focussed on planning, innovation and participation (the PIP model). Session activities were designed to enable parents and children of all ages and abilities to participate. Examples include:

- Archery target activity – a method for realising the relative importance of patient's requirement (prioritisation).
- Graphic scribe recording – to reflect back to the children that they had been heard/understood and stimulate creative ideas.
- Use of technology – making short videos to help families understand concepts.

## Results

- Our priorities and design brief changed as a result of the PPIE.
- The graphic scribe outputs formed part of the creative process whilst providing a unique and lasting resource.
- We are confident that we will produce NIV interfaces that are fit for real life purpose that people will want to trial.

## Discussion

- For respiratory research to be truly successful, PPIE should be woven throughout a project, from concept to completion.
- It needs to be genuine and aligned with research aims.
- Time and effort spent enabling participation and creatively planning for inclusivity is rewarded by generating richer and more valuable information.

P026

## DO MATERNAL AND PATERNAL COGNITIONS AND SLEEP-RELATED PRACTICES RELATING TO THEIR OWN AND THEIR CHILD'S SLEEP PREDICT THEIR CHILD'S PARENTALLY REPORTED AND ACTIGRAPHICALLY ASSESSED SLEEP?

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**Introduction** Various factors have been linked to child sleeplessness problems (CSP). These include parental cognitions about child sleep and bedtime behaviours parents use with their child. However, previous research has predominantly focused on mothers and how both parents think and behave in relation to their own sleep and broader sleep-related practices may also be important. The current study aimed to explore whether maternal and paternal cognitions and sleep-related practices (relating to their own and their child's sleep) and bedtime behaviours used with their child predicted subjective and objectively assessed child sleep.

**Method** Mothers and fathers from 44 families (with a 12–24 month old child) completed questionnaires assessing their sleep-related cognitions and practices relating to their own and their child's sleep. Parent's provided details about their child's sleep (including if they perceived their child to have a CSP). Actigraphy and sleep diary data was collected on the child's sleep for 5 nights. Regression analyses were conducted to explore if parental cognitions and sleep-related practices (relating to their own and child's sleep) predicted perceptions of their child's sleep and the child's actual sleep.

**Results** Binary regression models predicting parental perception of a CSP, for both mothers and fathers, were significant. Specific and different bedtime behaviours used with their child were the only significant independent predictors of both maternal and paternal perceptions of a CSP. For mothers, use of physical comforting and for fathers settling by encouraging autonomy and using movement were significant predictors. A hierarchical linear regression to predict objective child sleep from maternal and paternal variables was not significant.

**Discussion** Use of different bedtime behaviours were related to mothers' and fathers' perceptions of CSP. Additional research is required to elucidate the reason for apparent differences between parents; perhaps mothers and fathers find different types of settling methods more acceptable or undesirable?

P027

## THE EFFECTIVENESS OF OCCUPATION-BASED SLEEP PROGRAMME FOR PATIENT WITH INSOMNIA

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Sleep problems are a worldwide health issue, with an average prevalence rate ranging from 10% to 30%. The development of sleep intervention in occupational therapy is expanding, however, there is limited research evidence. Insomnia affects daytime occupational performance; and in return daytime occupational choice affects sleep. The Model