

PHPES - addressing the challenges faced by public health practitioners on the 'front line'

Building the evidence for cost-effective public health practice

Implementing a complex intervention to reduce smoking in pregnancy: **babyClear[®]** process evaluation



Our practitioner partners

The PHPES scheme enables people working in public health, who are introducing innovative initiatives aimed at improving health, to work in partnership with NIHR SPHR to conduct rigorous evaluations of their cost-effectiveness.



Fresh - the UK's first dedicated regional tobacco control programme, set up in the North East in 2005 to tackle the worst rates of smoking-related illness and death in the country.



babyClear[®] - an initiative developed by improving Performance in Practice (iPiP) to implement best practice to support pregnant women who smoke to get help to quit.

Smoking in pregnancy increases the risk of serious adverse outcomes including miscarriage, stillbirth and preterm delivery. Smoking rates among pregnant women in the North East are the highest in England, affecting around one in five pregnancies.

Background

Academics from Fuse (Centre for Translational Research in Public Health) based at Newcastle and Teesside

Universities worked in partnership with Fresh North East (a regional body which promotes smoking cessation), midwives and stop smoking staff to explore what might impede them



from implementing best practice and identified a need for improved implementation of guidance from the National Institute for Health and Care Excellence (NICE).

babyClear[®], a complex service reconfiguration intervention which is unique in the UK, had been developed by the Tobacco Control Collaborating Centre, part of Improving Performance in Practice (iPiP). They won the contract for their innovation to be introduced regionally.

Local public involvement and consultation activities led to a redesign of NHS referral pathways developed in collaboration with a regional innovation team for pregnancy and childbirth and Fresh.

The intervention aimed to improve referral to stop smoking services and quit rates via training of midwives and stop smoking advisers, provision of carbon monoxide (CO) monitors and an enhanced 'risk perception' intervention (RPI) and follow up regime.

Agreement was reached by all eight of the NHS Foundation Trusts in the North East, plus Heads of Midwifery and Local Authority Stop Smoking Services, to roll the new pathway out, starting in 2013.

Key issues

- Smoking at time of delivery (SATOD) rates have traditionally been high in North East England.
- Smoking in pregnancy has a significant impact on women and baby health by increasing the risk of premature births, stillbirths, miscarriages and complications after labour.

Key research questions

- Can a complex service reconfiguration, designed to improve delivery of smoking cessation interventions to pregnant smokers, be implemented and sustained?
- Is the new service acceptable to pregnant smokers?

Method

The process evaluation of this bold and complex initiative examined how acceptable the intervention was with participating women smokers, but also explored in depth the service conditions which make delivery and sustainability most likely.

Theoretical Domains Framework (TDF) and Normalisation Process Theory (NPT) were used to inform the interview questions. A wide variety of maternity and stop smoking service staff participated. Pregnant women who were on the babyClear[®] pathway were interviewed twice, both earlier in their pregnancy and again later or in the postnatal period. NPT was used as a framework to inform data analysis.

A consultation workshop was held to which commissioners, senior managers and clinical managers of stop smoking and maternity services within the region were invited. This gave the researchers an opportunity to seek wider input to the data collected from frontline staff.

This project was funded by the NIHR School for Public Health Research (SPHR) Public Health Practice Evaluation Scheme (PHPES).

About PHPES

PHPES projects are:

- **generated by front line practitioners;**
- **designed to provide transferable, robust evidence on the impact of local practice for local practitioners;**
- **developed and delivered in collaboration with NIHR SPHR academics building evaluative capacity in public health practice.**

About NIHR SPHR

The NIHR SPHR aims to build a high quality evidence base for cost-effective public health practices. We work with local practitioners and members of the public, carrying out a wide range of research projects and programmes with a school wide focus on alcohol, ageing well and health inequalities.

Key findings and learning for practice

- The training acted as good preparation for implementation of babyClear[®] by staff.
- babyClear[®] enabled staff to make challenging a women's smoking a maternity service norm.
- CO monitoring acted as a motivator to quit.
- Most women accepted the need for a hard-hitting approach like the risk perception intervention and valued the more intense follow-up.
- Applying a standardised pathway across very different local contexts was extremely demanding.
- It is important to ensure that this impact is sustained locally and extended to other areas.

Public involvement

A service user reference panel (SURP) was set up as part of the process evaluation, consisting of women who had a baby in the last few years and were smoking during their pregnancy. The purpose of the SURP was to give the researchers 'real world' insight into the drivers of smoking behaviour during pregnancy. The SURP helped develop the content of data collection tools and identified effective recruiting methods, as well as supporting the interpretation of initial findings and contributing to dissemination activity.

What next?

We would like to discover:

- The elements that must be maintained and those which can be tailored to local contexts without losing the integrity of the original model.
- The extent to which the babyClear[®] approach is sustainable.

“Smoking during pregnancy is an issue the North East needs to collectively tackle together, and babyClear[®] is a national first to embed best practice within every maternity service across the whole region.”

Ailsa Rutter - Director of Fresh

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References

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