An Evaluation of the Peppy Baby Programme in Manchester University Foundation Trust

Executive Summary

Professor Amy Brown¹
Dr Sara Jones¹
Dr Aimee Grant¹
Professor Michael Coffey¹
Dr Andrew Mayers²

¹Department of Public Health, Policy and Social Sciences, Swansea University, UK





²Department of Psychology, Bournemouth University, UK

1. Context

In Autumn 2020, Swansea University, in partnership with Bournemouth University, were commissioned to undertake an evaluation of a new pilot programme for new parents called 'Peppy Baby' that was delivered during the COVID-19 pandemic. This programme was funded by the NHS and MHCLG 'TechForce 19' programme as an innovative intervention to meet the needs of those who were particularly vulnerable or isolated as a result of the COVID-19 pandemic and subsequent lockdowns and social distancing.

With this funding the Peppy Health team designed a support package for new mothers based around a mobile phone app. The programme covered core topics such as infant feeding support, mental health, pelvic floor care and broader support in adapting to new parenthood. Support was delivered via the app which connected parents with perinatal practitioners, and services such as group chats, live broadcasts and referrals to specialist services if needed. Women took part from late pregnancy to eight weeks postpartum.

This evaluation sought to explore the impact of the programme upon infant feeding, mental health, pelvic floor care and parenting confidence, alongside the perceived usability, acceptability and effectiveness of the programme and app. Finally, perceptions of integration of the programme with existing local services and impact upon workload were examined. The views of mothers who took part in the programme, local health professionals and local commissioners were included to shape and conduct the evaluation.

2. Background

The 'first 1001 days' covering pregnancy and the first two years of life are recognised by the government as a key time for investment and support due to the impact upon infant development and parental mental health (DHSC, 2021). Policies such as Public Health England's 'Healthy Child Programme' seek to ensure parents have the support they need during pre-conception, pregnancy and the postnatal period, particularly in relation to infant feeding, mental health and maternal physical recovery (PHE, 2021).

Supporting new parents with infant feeding is a key area of investment because of the significant body of research illustrating how breastfeeding protects both infant and maternal health (Victora et al, 2106). However, the UK has some of the lowest breastfeeding rates in the world, due to complex physiological, psychosocial and cultural barriers to women initiating and continuing breastfeeding (Rollins et al, 2016). This means that investing in consistent and evidence-based support for breastfeeding is important and has been shown to have a significant impact on breastfeeding duration (McFadden et al, 2017).

A second core area of strategic investment is maternal mental health. The perinatal period is a time of great change particularly for first time parents transitioning into a new role. It is recognised that parents need support during this time, both in learning how to practically care for a baby and support in adapting to parenthood (Winson, 2017). For some parents the stress of this transition can contribute to postnatal depression impacting on parental mood, physical health and functioning (Milgrom et al, 2008). Postnatal programmes that help support parental wellbeing, provide a sense of reassurance, and develop a feeling of community are vital to supporting new parents (Gilmer et al, 2016).

A third area of importance is maternal pelvic floor health during pregnancy and post birth. Pelvic floor dysfunction issues after childbirth such as urinary incontinence, pain, and discomfort during sex affect around a third of new mothers with considerable physical and psychological impact (Hay-Smith et al, 2008). Pelvic floor strengthening exercises have been shown to be effective in reducing a range of pelvic floor issues (Boyle et al, 2014). However, many women do not receive sufficient information during pregnancy about this, in part because midwives lack time or sometimes training to convey messages (Terry et al, 2020).

Unfortunately, despite the recognised importance of investment in these areas, UK maternity, health visiting and specialist perinatal health services have faced significant shortfalls in terms of staffing and services over the last few years, meaning that many new parents do not get the support they deserve (IHV, 2021). This has been exacerbated by the COVID-19 pandemic which has left many new parents feeling isolated and lacking in support (Babies in lockdown, 2020). It is recognised that now, more than ever, investment is needed for programmes that can support the needs of parents and babies through the perinatal

period, particularly those which are innovative and harness new technologies in an effective way (NHS Digital, 2021).

The aim of this evaluation was therefore to evaluate the impact of the programme upon the key areas of infant feeding, mental health and pelvic floor care, alongside programme acceptability and feasibility, and integration of the support into existing perinatal care.

3. Methodology

The methodology for the evaluation consisted of:

- Part One: A longitudinal online questionnaire, collected over four time points for all mothers who took part in the programme
- Part Two: Online interviews with a group of mothers who took part in the programme
- Part Three: An online questionnaire for local health professionals
- Part Four: An online questionnaire for local commissioners

4. Key findings

The programme was valued by mothers and local health professionals. It was considered an effective and acceptable way of delivering support especially during the COVID-19 pandemic. Mothers felt that it helped them feel more confident, informed and supported, and health professionals recognised how well it fitted the ethos of perinatal support. Overwhelmingly both mothers and health professionals would like to see the programme expanded and continued outside of a pandemic context.

Specific highlights included:

Value of 1-2-1 support from Peppy practitioners:

The Peppy practitioners were highly valued by mothers. The 1 – 2 – 1 support generated
a feeling that the Peppy service was trustworthy and individually tailored rather than a
generic service. Support was seen as proactive with regular practitioner led check-ups.

- The continuity of one-to-one support enabled the development of a relationship between practitioner and mother, which particularly helped when mothers were experiencing any difficulties.
- The delivery of the programme via the app rather than face to face appointments and events played a role in helping mothers connect with the support, especially during the pandemic. The convenience and ease of the texts and video calls were emphasised.

Value of Group chat

- Group chats, where a practitioner brought together a group of mothers for a live social chat, were valued as providing a supportive community.
- Group chats were reassuring as they helped mothers recognise normal and common baby behaviour and new parenting struggles that other mothers were having too. This helped women feel less isolated and anxious.
- Group chats were especially valued within the context of routine face-to-face support groups for pregnant women being paused during COVID lockdowns.

Impact upon infant feeding

- Breastfeeding rates were high amongst participants compared to local and national rates. Almost 90% of mothers were breastfeeding during the first week and 80% at eight weeks, including almost two thirds doing so exclusively. A higher proportion of mothers from BAME groups were breastfeeding compared to White mothers.
- Although the sample might represent mothers who are older and more motivated to breastfeed, evaluation of breastfeeding support given suggested the programme further supported breastfeeding. Over 90% of mothers felt that Peppy helped them feel more knowledgeable and confident about breastfeeding.
- The programme also provided positive bottle-feeding support. Over 90% of mothers
 who received support with bottle feeding felt more confident and knowledgeable about
 safely and responsively bottle feeding their baby.

Impact upon mental health

- Mental health significantly improved during the programme. At enrolment 30% of women were considered as having symptoms of possible depression as measured by the Short Warwick-Edinburgh Mental Wellbeing Scale. At eight weeks postpartum just 10% of women were considered to have possible depression.
- Women from BAME groups were three times more likely to be classed as having high mental wellbeing (28%) compared to White women (11%) at eight weeks.
- Mothers felt that the practical and emotional support given during the programme
 helped increase confidence around infant care and reduce relationship tensions during
 the transition to parenthood. Support with other aspects such as infant feeding and
 pelvic health also increased wellbeing.

Pelvic health support

- Pelvic floor support sessions were viewed as useful in helping raise awareness of the importance of care.
- Mothers who accessed pelvic health support attributed it to supporting them to have a more straightforward birth.
- Awareness and access of pelvic floor support through the programme was lower than for other areas, with few women discussing complications with their practitioners.

Impact upon parenting confidence and self-efficacy

- Over 80% of mothers accredited the programme as leaving them feeling more confident and less anxious about caring for their baby, and more relaxed as a new parent.
- A core part of this increase in self-efficacy related to being able to have their questions
 answered promptly from an expert source. The feeling of being able to ask small
 questions on a regular basis helped mothers feel more confident.
- Others felt reassured by knowing that other mothers were going through similar challenges too and that how they were feeling was 'normal'.

Use of other NHS services

- Over 40% of mothers reported that they reduced contact with their midwife or health visitor due to support from Peppy practitioners. Typically, mothers directed smaller everyday queries to practitioners, supported by the ease of using the app.
- However, the programme also encouraged necessary contacts; 40% of mothers
 contacted their midwife or health visitor with an issue after speaking to their
 practitioner. Others were referred for specialist infant feeding or mental health support.
- Two thirds of mothers reported that the programme helped prepare them for their sixweek check, through increased awareness of what to expect at the appointment.

Perceptions of local health professionals

- Health professionals recognised the value that the programme offered mothers,
 describing how mothers felt supported and more confident from having additional
 layers of support. This felt reassuring, as they knew mothers had another avenue of
 support to turn to when they were busy or could not immediately return calls.
- Health professionals could see that mothers were accessing support from the
 programme, but that this didn't feel as if it impacted upon their day-to-day load, most
 likely due to small numbers of their caseload taking part.
- Over 95% of health professionals felt that the project worked well alongside existing support and would like to see it continue, but wanted clarification upon the impact on their future job security and workloads. Professionals emphasised the need for the programme alongside existing support rather than instead of.

Overall perceptions

- The majority of mothers who took part in the programme were highly likely to recommend it to a friend
- Over 85% of mothers perceived the programme as non-judgemental, helping them to feel more confident, and supportive in helping them make decisions.
- Mothers from BAME backgrounds perceived the programme slightly more positively and would be more likely to recommend the programme compared to women from White backgrounds.

Ideas for improvement

- Clarity on timing and content: Some mothers also talked about missing out on some support because they were unsure what was available. Some health professionals mentioned women missing out on the programme as they did not realise it was available.
- *Timing and recording of live sessions:* A broader variety of live session timings to enable more partners to take part. Recording would allow parents to watch back later
- A longer duration: Many mothers and professionals viewed a need for the programme to last longer, albeit at a lower intensity, to cover stages such as introducing solids or returning to work
- *Gentler ending and support maintaining connections*: Mothers wanted support in maintaining connections, perhaps through a post programme support group.
- Inclusion of partners: More sessions and support aimed at partners

5. Key conclusions

The programme was perceived by mothers as supportive, non-judgemental, and easy to use, with positive impacts seen upon core areas of infant feeding, maternal mental health, and pelvic floor health.

Although the number of women taking part was small in terms of the birth rate in the area, the evaluation highlighted a likely positive reduction in pressure upon local midwifery, health visiting and GP services and was seen as an acceptable and supportive programme by health professionals working in the Trust.

It was particularly timely during the COVID-19 pandemic, providing connection and support to new parents at a time of significant stress. Although there were some suggestions for improvement of the programme, many of the women involved wished to see it continue and would recommend it to a friend.

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