Blossom Antenatal evaluation report

Executive summary

Blossom Antenatal offers online antenatal education. Formed in response to the COVID19 pandemic in March 2020, and with an initial focus on support for breastfeeding, Blossom Antenatal quickly grew in response to demand. It now offers a range of accessible online education courses for new and expectant parents, as well as a growing online support network.

This evaluation looks at the impact of Blossom Antenatal education. It evaluates the impact on expectant and new mothers: how informed, confident they feel about feeding and taking care of their baby – and how connected they feel after Blossom classes. It also identifies key features of the Blossom Antenatal model.

Using a collaborative approach, evaluators worked with the Blossom team to design a longitudinal evaluation using surveys and interviews, gathering data at four time-points before and after babies were born. Descriptive and thematic analysis was used to look at the whole data set, to track respondents over 3 months, and to look at those people accessing different amounts of Blossom education.

Top Line key findings

Pregnant women in 2022 have concerns or worries about giving birth and taking care of their babies. **There is a need for accessible, high quality antenatal education**.

Blossom Antenatal education gives expectant mothers the knowledge and confidence to choose the right feeding approach for them.

- **Blossom breastfeeding class gives people the information they need to make a choice about feeding** (92% had the knowledge needed after compared with 42% before)
- **6-8 weeks after the birth of their baby, 68% of Blossom-supported mothers exclusively feed their babies breastmilk, compared with 48% nationally**

High quality, practical information is a core part of the Blossom Antenatal offer.

- **Blossom gives people the information they need to take care of their baby and of themselves** (90% of respondents felt they had the information they needed, a 21% rise)
- **Postnatal as well as antenatal information, and on-going support is highly valued**

The more Blossom education people receive, the bigger the impacts.

- **The more Blossom education people receive, the more confident they are about deciding how to feed their baby. They are also more likely to choose and stay exclusively breastfeeding** (85% at 2 weeks and 100% at 6 weeks)**.**
- **At 6 weeks, 100% of people who had multiple Blossom classes felt they had the knowledge**

they needed to choose how to feed, 86% of people attributed this to Blossom.

- **The more Blossom education people receive, the more knowledgeable and confident they are about taking care of themselves and their baby** (100% felt they had the knowledge needed)
- **There are indications that people attending more Blossom classes feel less lonely**
- **Key to these enhanced benefits is engagement with Blossom postnatally and engaging in 'support activities' such as WhatsApp groups or weekly repeat activities including yoga and relaxation sessions.**

Blossom antenatal education enhances some aspects of maternal well-being

- **After the 4-week antenatal course concerns and worries reduce**
- **There is limited evidence that attending Blossom classes makes people feel less lonely or isolated,** however….
- …. **over ¾ (77%) of people taking part in Blossom support activities (such as the WhatsApp groups) say they feel supported and key to this is being able to communicate with mums of babies of a similar age**

Some key features of the Blossom model are unique to Blossom.

- The **accessibility** and **affordability** of classes are important throughout. **Knowledge, experience, warmth** and **practical advice** are more important as time goes by.
- The ability to **tailor-make** a personalised antenatal package; to **select just what is needed and when** was highlighted as unique to Blossom.
- **The nature of Blossom's online offer across classes, weekly sessions and WhatsApp groups supports pregnant and new mums well**.

The majority Blossom journeys are short, but there is a key time for re-engagement

- **By far most journeys start with the free breastfeeding class**
- **After their initial classes, 85% of people indicate they will access more, but the majority don't.** 26% of respondents attended other activities during pregnancy, 15% once their baby was born
- **Around 8 weeks after the birth of their baby, people are ready to re-engage**
- **The content and timing of emails from Blossom help keep people engaged**

Blossom Antenatal provides high quality and impactful online education and support for expectant and new mothers. The high-quality evidence-based information, knowledge and experienced teachers, and participants' ability to build their own tailor-made packages are key elements to this success.

The more Blossom people access, the bigger the impact on knowledge, confidence and on feeling connected; key to these bigger impacts are engagement in support activities such as WhatsApp groups, and classes after their baby is born. Thinking of ways keeping expectant and new mothers engaged is critical.

Contents

Background

Antenatal education

The Government's Maternity Transformation programme[1] aims to ensure 'safer, more personalised, kinder, professional and more family friendly care', where women can access enough information and support to make the right choices for them. Supportive and accessible antenatal education is crucial if this plan is to be realised.

New and expectant parents need information, support and new skills. Finding a way for them to get this is crucial to the health and well-being of both babies and parents. The many health benefits to parents and babies receiving antenatal and postnatal support are well documented[2] and include impacts on uptake and retention of breast feeding, improved mental health[3] and child development.

Parent education classes are an important route to this in the UK and are recommended to be offered to all women to support information sharing during pregnancy[4]. Traditionally, new and prospective parents have gained knowledge and developed new skills through face-to-face support from health visitors, midwives or through joining classes such as those offered by the NHS and National Childbirth Trust (NCT). Group-based programmes have also been shown to be particularly effective in helping new parents to develop supportive social networks with their peers and in supporting women with low-level symptoms of depression and anxiety.

During the Covid 19 pandemic, this face-to-face support and education stopped. Two seminal reports[5] explored the impact of the Covid-19 lockdown on pregnancy and parenting. They found a significant impact on the way maternity care was delivered with negative effects on parental mental health, on information and support networks, and on children's development. An annual survey looking at the experiences of women who had a live birth in early 2021 highlighted a lack of support for women and their families, particularly in the postnatal period[6]. The COVID-19 New Mum Study[7] found that a large proportion of new mothers surveyed reported symptoms of low mood, anxiety and loneliness during the lockdown. Not surprisingly, attendance at antenatal education classes plummeted. One survey found that in 2020 only 8% of pregnant mothers attended NHS antenatal classes, down from 30% in 2014[8].

[1] https://www.england.nhs.uk/mat-transformation/
[2] Schrader McMillan A, J Barlow and M Redshaw (2009) Birth and Beyond: A review of the evidence about antenatal education, University of Warwick/University of Oxford
[3] https://pubmed.ncbi.nlm.nih.gov/32281410/
[4] NICE 2008
[5] the Royal Foundation State of the Nation report, and Best Beginnings/HomeStart Babies in Lockdown report
[6] CQC Maternity Survey 2021
[7] International Journal of Gynaecology and Obstetrics Maternal mental health and coping during the COVID-19 lockdown in the UK: Data from the COVID-19 New Mum Study (2020)
[8] National maternity survey https://www.npeu.ox.ac.uk/maternity-surveys

Blossom Antenatal education

Blossom Antenatal offers online antenatal education. It formed in response to the COVID19 pandemic in March 2020 to meet the immediate needs of families across the UK for breastfeeding, labour & birth and early parenting support. Its initial focus was support for breastfeeding, a pressing need due to the associated infant and maternal health benefits. Blossom Antenatal quickly grew in response to demand and now offers a range of accessible online classes for new and expectant parents, as well as a growing online support network. Some of these classes and sessions are free (for example breastfeeding) and some are charged for.

Type of session	Name of session
Blossom Classes	Breastfeeding
	Four-week antenatal course (including labour and birth and dads and partners)
	Formula feeding
	Solo Mums
	Motherless mums
	Infant First Aid
	Sleep
	Caesarean Sections
	Caring for your mental health
Blossom Support Activities	Weekly relaxation Sessions
	Weekly yoga
	Weekly Babyclub
	Instagram Livestreams
	WhatsApp Group set up by course leaders

Since it began, Blossom Antenatal has reached over 70,000 parents with their classes. Previous analysis of survey data shows a rise in confidence after attending sessions, with 98% reporting to be at least somewhat confident. Participants rate the sessions highly, with the majority finding the information easy to understand, practical and accessible from knowledgeable teachers. Reaching new and potential parents in this way provides the route to crucial information, and support.

A rise in the confidence parents feel in being prepared for their baby's birth is promising, however there remain questions about the nature and impact of Blossom Antenatal immediately after attending sessions and in the longer term.

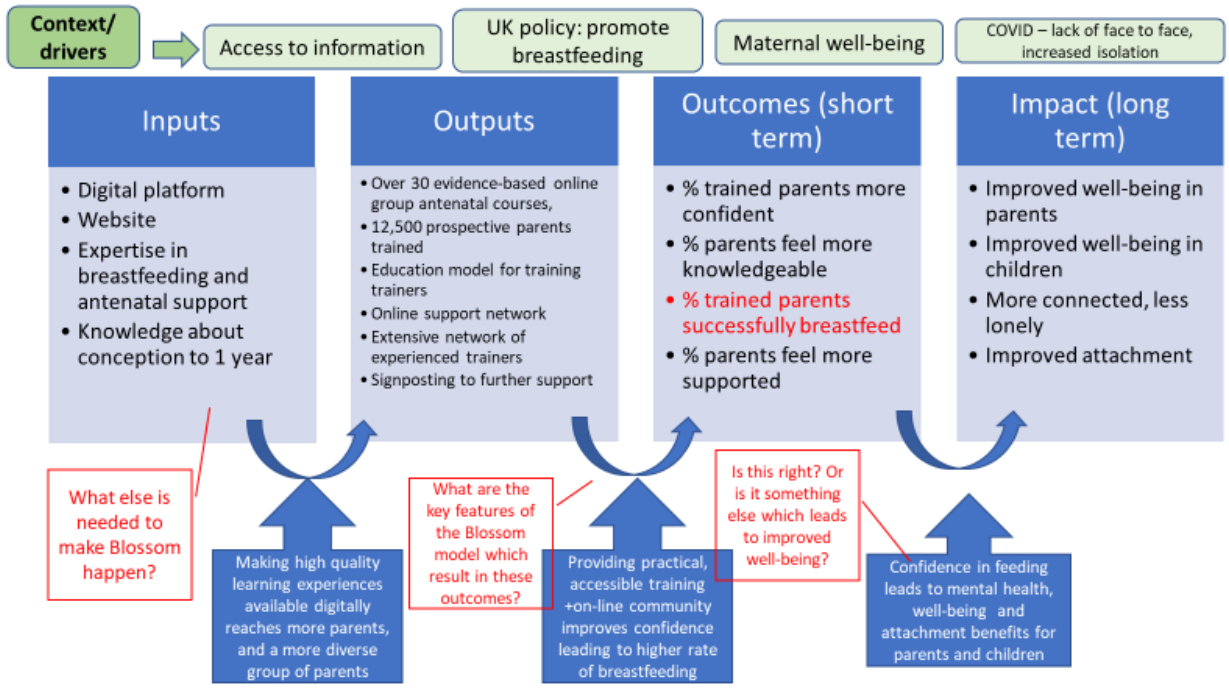
This evaluation looks at the impact of the Blossom Antenatal education offer as a whole on parents' confidence in making choices about feeding and taking care of themselves and their baby. It looks at the impact on well-being and support in the longer term. The evaluation also explores which classes or combination of classes, and wider support activities, make the most impact. The evaluation does not look at each individual class but rather the whole Blossom offer and how expectant and new parents navigate this. We have also explored the responses from the breastfeeding class and four-week antenatal course, as the data sets were large enough and these are courses central to the Blossom offer.

Post pandemic, Blossom Antenatal is looking at developing a sustainable and impactful offer. This evaluation identifies the key features which contribute to the impact of Blossom Antenatal and makes recommendations about the future.

This evaluation took place September 2021 - March 2022, after the third national lockdown for the COVID-19 pandemic. This means that respondents will have gone through their antenatal, labour and birth, and postnatal stages when services were still limited and Covid restrictions still in place. Therefore, this evaluation reflects experiences of care in exceptional circumstances. However, learning from this evaluation can be taken forward to offer expectant parents a more flexible, bespoke antenatal and postnatal offer.

The evaluation framework

This evaluation tests out an emerging theory of change for Blossom Antenatal:



By providing high quality online antenatal classes and a support network across a range of methods (zoom classes, Instagram live stream and WhatsApp), Blossom Antenatal aims to give parents the information and support they need to care for and feed their baby. The theory is that this results in them feeling positive about their baby, and less lonely.

This evaluation answers the following questions:

Evaluation question	**Outcomes** What Blossom hope to achieve, and what will be measured
What is the impact of Blossom antenatal education on: ● Parental confidence in feeding their babies, and deciding about how to feed them ● Maternal mental health and well-being	Parents ➢ Feel more knowledgeable and confident in feeding their babies before and after the birth of their child ➢ Make a positive transition to feeding ➢ Successfully breastfeed ➢ Have the information and support they need to take care of themselves and their baby ➢ Feel positive about their baby ➢ Feel connected and less lonely
Which aspects of Blossom are key to achieving these impacts/key to the success of Blossom?	Blossom Antenatal ➢ Know the key features of their education model - what makes it work ➢ Understand which level of Blossom input makes the most impact ➢ Understand different Blossom journeys ➢ Have a series of statistics and messages that can be tailored to meet the needs of specific funders
How did Blossom education offer support to expectant mothers, especially during the COVID-19 pandemic?	Parents ➢ Feel part of a Blossom network (digital community) ➢ Feel supported before and after having their baby Blossom Antenatal ➢ Knowledge about what parents want to enable them to take Blossom forward as COVID restrictions ease.

Methodology

A mixed methods approach was used, with both quantitative and qualitative data gathered. The evaluation has a longitudinal design, with data gathered at four time points: before and immediately after attending sessions, 2 weeks after the baby's birth, and 6-8 weeks after baby's birth.

The evaluation approach was responsive and collaborative. Evaluators worked closely with the Blossom team to design surveys and interviews, through attending Blossom sessions and through discussion. The survey analysis informed further development of interviews so that emerging themes could be explored

in more depth. Analysis was shared with the Blossom team, and measures were further refined following this, for example an additional survey was designed to capture the impact of the digital community formed after the sessions (using WhatsApp). The survey (known as the 'WhatsApp Survey') was designed to capture the impact of one aspect of the Blossom approach felt to be missing from other measures.

Data was gathered through surveys, learning conversations and through interviews.

Immediately before class	**Immediately after class**	**2 weeks after baby's birth**	**6-8 weeks after baby's birth**
Time 1 (T1) Survey	Time 2 (T2) Survey	Time 3 (T3) Survey Learning conversations	Time 4 (T4) Survey Interviews WhatsApp survey

Participants

All people taking part in Blossom classes or WhatsApp groups were invited to take part in the evaluation surveys. This includes expectant mothers, birth partners and family members. The vast majority of those who completed a survey (99.6%) were the expectant or new mother therefore our findings refer to impact on mothers. We do not have enough responses to draw conclusions about the impact on birth partners or family members more generally. All people who indicated in their 6–8-week survey that they were willing to be contacted were invited to take part in interviews, again these respondents were all mothers. A sample of Blossom staff was invited to take part in a learning conversation.

Background demographic data on survey respondents was collected.

At T4 participants were categorised according to how much Blossom input they received (their dose):

Low dose	One class; no further interaction
Medium dose	Two or more classes in pregnancy OR one class plus one other activity (e.g., relaxation, Instagram live stream) during pregnancy
High dose	Two or more classes in pregnancy and engagement with Blossom beyond pregnancy

Measures

After discussion with the Blossom team and following a literature search, surveys were constructed using a combination of rated questions, questions where respondents could select a set number of priorities for them, and open questions. Questions covered information, support, confidence and maternal well-being.

Maternal well-being was measured in two ways:

- A scale similar to others used in surveys asking participants to think how often they had felt certain feelings[9]
- A standardised three-point scale looking specifically at loneliness in pregnant and new mothers[10]

Interviews were semi-structured, focusing on issues arising from the surveys: on-going engagement with Blossom, high quality information, key success factors and loneliness. Interviewees were asked to think of specific examples from their Blossom experience. Learning conversations were held with members of the Blossom team. These were semi-structured, encouraging participants to reflect on their involvement with Blossom and the key factors unique to Blossom.

Surveys and interview schedules can be found in appendix 1 (Page 46).

[9] For example, Krienke et al (2009) An Ultra-Brief Screening Scale for Anxiety & Depression: The PHQ– 4 *Psychosomatics 50*

[10] Hughes et al (2004 A Short Scale for Measuring Loneliness in Large Surveys Results from Two Population-Based Studies. *Research on Aging V 26*

Summary of measures used:

Outcome	How will this be measured?	What measure will be used?
Parents feel knowledgeable and confident in feeding their babies before and after the birth of their child	Questions at different time points Feedback from participants	Survey Interviews Case studies
Parents make a positive transition to feeding		
Parents have the information and support they need to take care of their baby		
Parents feel positive about their baby		
Parents feel connected/less lonely		
Blossom knows the key features of their education model - what makes it work	Questions at different time points. Group parents according to how much Blossom input Feedback from Blossom participants	Qualitative questions on surveys Interviews, learning conversations Case studies
Blossom understands which Blossom journey makes the most impact		
Blossom has a series of statistics and messages which can be tailored to meet the needs of specific funders	Analysis of the data and comparing to key drivers for funders	Existing data sets, reports/policy/research

Data protection and ethical considerations

All surveys were sent directly to participants by the Blossom administration team, who also stored returned forms. These were shared anonymously with the evaluation consultants. Participants were assigned a unique number which was aligned with their Blossom membership number. Anonymised data was stored by evaluation consultants on a secure shared Google Drive and deleted at the end of the evaluation.

All surveys contained a consent statement. By returning the completed surveys, participants were agreeing to take part in the evaluation. An accessibility written information sheet gave details of the evaluation and indicated who to contact with any queries.

Interviewees were informed about how their data would be used and stored via an information sheet and verbally at the start of the interview. Interviews were recorded on stand-alone audio recorders or via Zoom and listened to several times for thematic analysis. Once this process was complete the recordings were deleted in accordance with the consent agreement. Contact details for participants were not stored with the interview recordings. The recordings were not shared with or retained by Blossom.

This evaluation report does not contain any identifiable personal data. All names associated with case studies have been changed.

Data analysis

All data was initially cleaned and sorted:

- any duplicates were removed
- where participants had completed multiple surveys for the same class (for example the relaxation class), the first and last survey were kept, and others were discarded
- data were segmented for comparison according to class attended, timing of survey and 'dosage' (level of engagement with Blossom)
- participants who had completed surveys at multiple time points were tracked. Those completing three surveys were identified (these had completed a survey immediately before a class, a survey at 6–8-week post-birth and one other survey)

Data was then analysed:

- **Quantitative** data from surveys (rating scales, yes/no answers, multiple choice questions) were analysed descriptively to show
    - change before and after a class
    - change over time at group level
    - change for specific classes
    - comparisons between classes
    - the impact of the level of Blossom 'dosage'
- Where possible, survey data was compared with national datasets (e.g., PHE and NHS digital breastfeeding data, participants' experience compared with other sources of antenatal information/education)
- **Qualitative** answers in surveys were analysed using informal thematic analysis to yield key themes. Where there were more than 12 people commenting on the same theme, this became a key theme.

Themes and questions arising from the survey analysis were then explored in interviews and learning conversations.

- **Interview and learning conversations** were analysed using informal thematic analysis. Recordings were listened to, and emerging key themes identified. Where more than 80% of interviewees commented on the same theme, this became a key theme. These were then cross referenced with themes emerging from the survey data.
- Case studies and quotes were identified and transcribed from interviews and other qualitative data.

Analysed data was shared at two timepoints with the Blossom team (October 2021 and February 2022) and further analysis conducted based on these discussions. For example, exploring responses from a specific class or course (namely Breastfeeding and the four-week antenatal course) and developing further surveys (the WhatsApp Survey) to respond to a key feature of the Blossom offer that was not being picked up elsewhere in the data.

Results

There was a good response to completing surveys. This was particularly so before and after the Blossom breastfeeding class, but also across other classes and activities offered by Blossom Antenatal.

Respondents

Survey respondents: Demographics

Respondent	Age	Ethnicity	Disability
New or expectant mother 99.3%	19-24 yr. olds 1%	White British 68%	Yes 2%
Partner 0.5%	25-29 yr. olds 29%	White: Other 14%	No 98%
Family member 0.2%	30-34 yr. olds 45%	Asian/Asian British 10%	
	35-40 yr. olds 22%	Black/Black British 2%	
	Over 40 yrs. old 3%	Mixed heritage 3%	
		Other 3%	

Survey respondents: By Class

Class	Pre event	Post event	2 weeks post birth	6 weeks post birth
Antenatal breastfeeding	831	395	66	46
4-week antenatal course	67	24	34	15
Baby Club	23	25	1	0
Breastfeeding space	16	11	1	0
Caring for your mental health	32	15	3	2
Motherless mums	3	0	2	1
Relaxation hour	48	39	5	4
Solo Mums	9	5	1	2
Other (hypnobirthing, dads and partners caesarean section)	0	0	17	9

Nineteen survey respondents who had indicated they would be happy to speak with the evaluation team at their 6–8-week survey were contacted. Six responded and were interviewed. These six represented new mothers who had accessed a range of classes (all levels of dosage) but were skewed towards people who had a medium or high level of engagement with Blossom Antenatal.

Interview respondents

Participant	Blossom classes	Additional Blossom	Another provider?	Continuing with Blossom?
1	Breastfeeding (B/F), 4 Week Antenatal, Mental Health	WhatsApp group	NHS, NCT	No
2	B/F, 4 Week Antenatal	Relaxation	Yes, local	Yes
3	B/F only	None	NHS	No
4	B/F and 4 Week Antenatal	WhatsApp group	NHS, Calm Birth	Not yet, has signed up
5	B/F, 4 Week Antenatal, First Aid	None	No	Not yet but will do Sleep Workshop
6	B/F, Labour and Birth, Sleep Workshop	None	No	Baby Massage but planning on Weaning, Soothing

Learning conversations were held with three members of the Blossom team:

- one experienced teacher,
- one relatively new teacher and
- one member of the Blossom management team involved in strategic development of Blossom.

How are expectant mothers feeling?

Before starting Blossom classes, many people felt they needed information or had concerns:

- 19% of participants said they did not have the information they needed about the birth of their baby
- 17% said they did not have enough information about taking care of their baby
- 57% were not sure or didn't have the information they needed about feeding their baby
- 60% were concerned about feeding their baby
- 71% of participants were motivated to attend by the interesting content
- 79% were concerned or worried about giving birth at least for half of the week
- 73% were concerned or worried about taking care of their baby

Respondents were keen to work with Blossom to evaluate their antenatal support:

"I like the fact that I can participate in this interview because it was useful for me the workshop and lovely for me to give something back to Blossom" (Interviewee 3)

Outcomes

In this section, progress against each outcome will be reported bringing evidence from surveys, interviews and learning conversations.

Outcome 1**: Expectant parents will feel knowledgeable and confident in feeding their babies before and after the birth of their child**

Data from Blossom's breastfeeding class was analysed, and results were compared before and immediately after the class. 99% of respondents were expectant or new mothers. This showed:

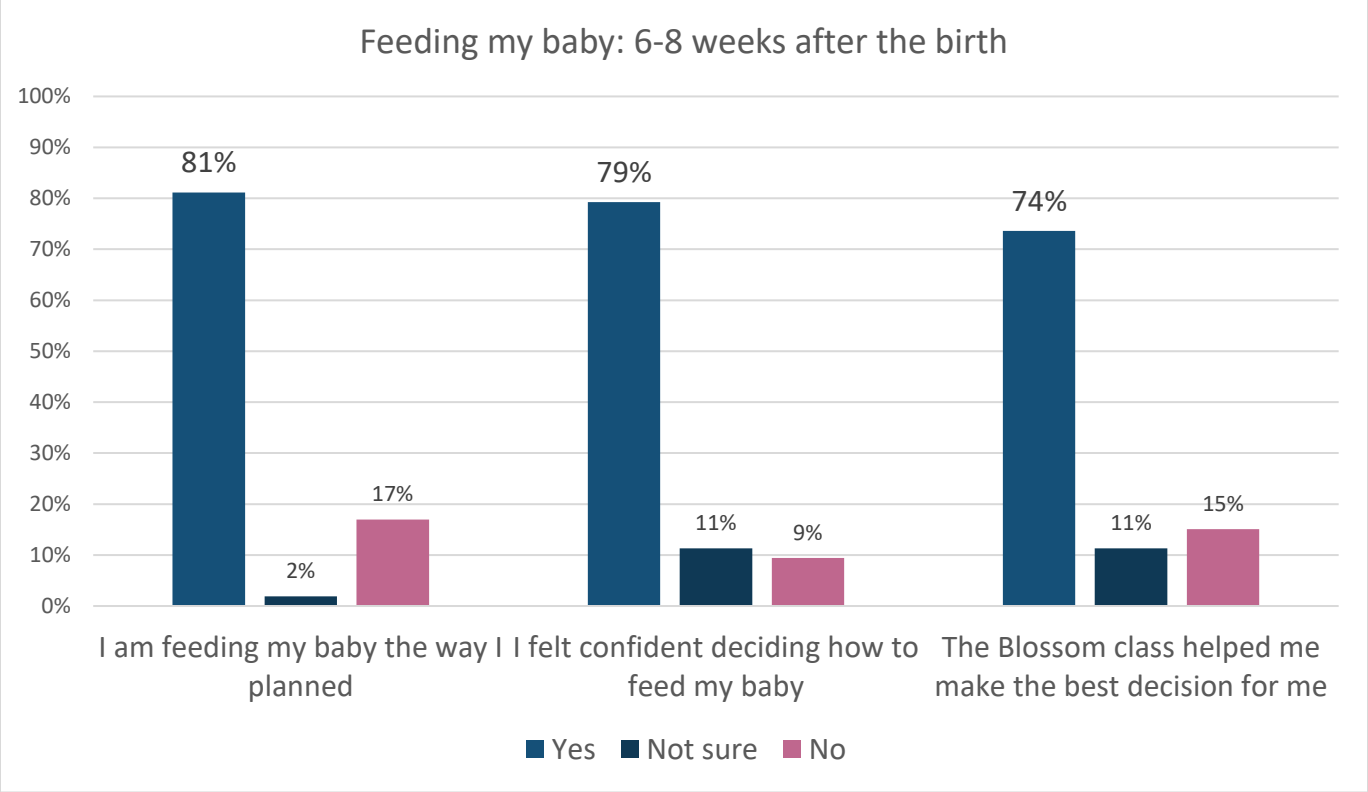
- 93% participants had the knowledge they needed after the class compared with 42% before
- 36% had concerns about feeding after the class compared with 65% before

Immediately after attending Blossom sessions, there was also a rise in the number of people planning to exclusively breastfeed their child (75% compared with 68% before).

This confidence in being able to know how to feed their babies in Blossom-supported mothers is sustained well after their babies are born.

6-8 weeks after the birth of their baby:

- 81% were feeding the way they had planned
- 79% felt confident making a choice about feeding
- 74% reported that Blossom had helped them to make the best decision for them about feeding



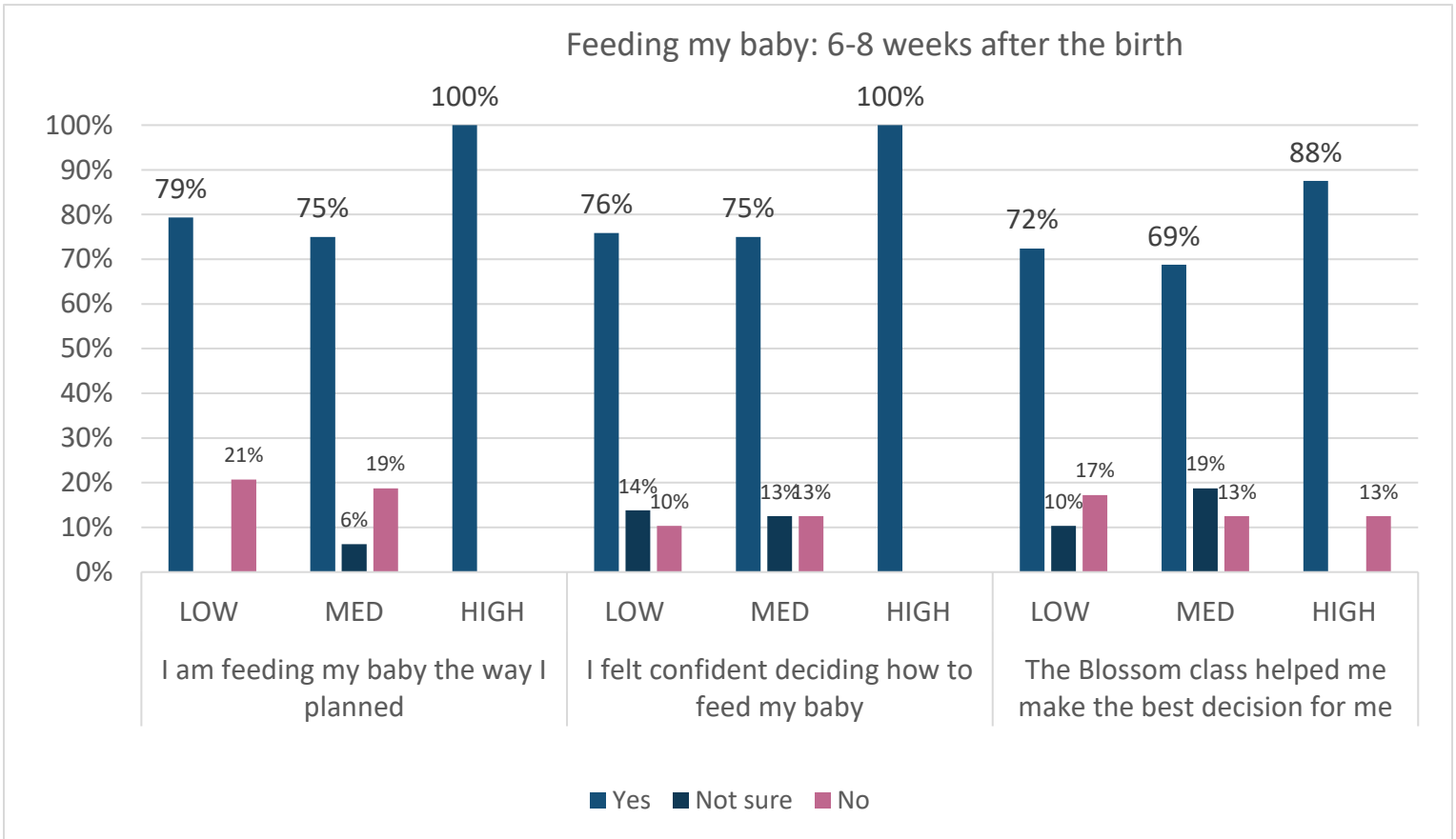
"The breastfeeding class was an eye opener for me. I came in with zero knowledge and I came out feeling a lot more confident about what to look out for and what to do." (Interviewee 6)

Respondents were grouped according to how much they engaged with Blossom Antenatal:

Low dose	One class; no further interaction
Medium dose	Two or more classes in pregnancy OR one class plus one other activity (e.g., relaxation, Instagram live stream) during pregnancy
High dose	Two or more classes in pregnancy and engagement with Blossom beyond pregnancy

People who attended more Blossom sessions and continued their engagement beyond pregnancy (high dosage) were even more confident in deciding how to feed their baby.

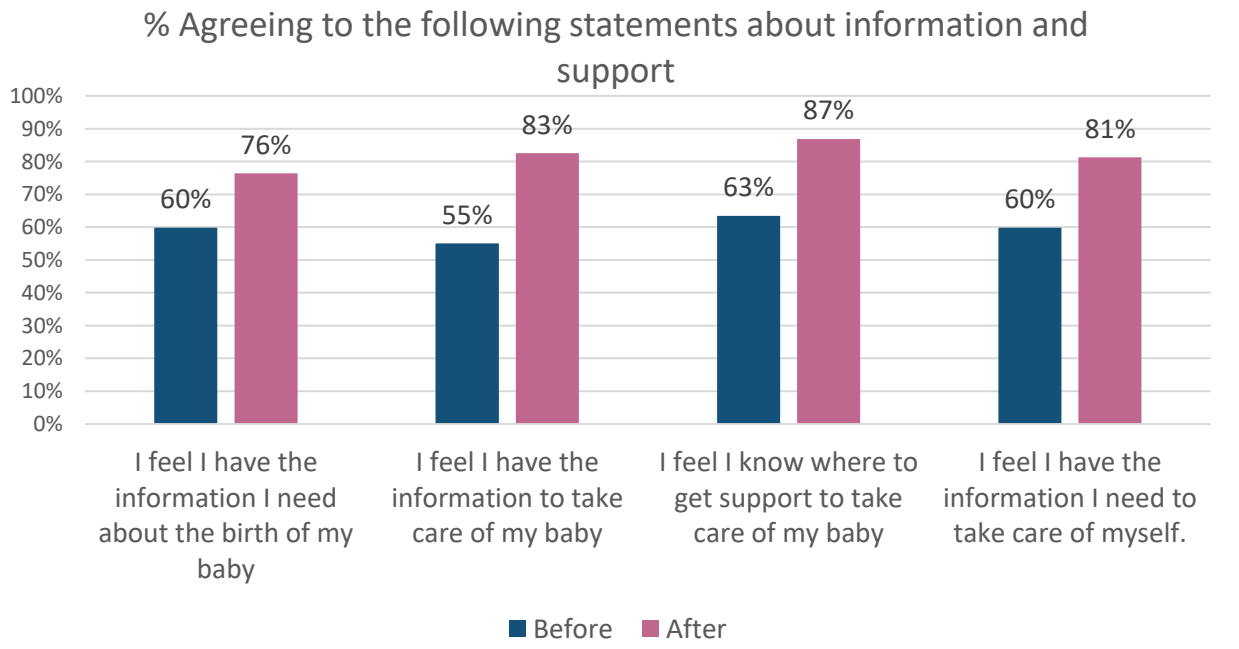
They were also likely to feed their baby exclusively breast milk (85% of respondents at 2 weeks, 100% at 6-8 weeks post birth).



Key messages about feeding following Blossom breastfeeding class.

- **A high percentage of expectant mothers have worries or concerns about giving birth (79%) and taking care of their babies (73%).** There is a need for high quality antenatal education.
- **Blossom breastfeeding class gives people the information they need to make a choice about feeding** (93% had the knowledge needed after compared with 42% before)
- **Blossom breastfeeding class makes people feel less worried about feeding their baby** (36% had concerns after compared with 65% before)
- **6-8 weeks after the birth of their baby, 68% of Blossom-supported mothers exclusively feed their babies breastmilk, compared with 48% nationally**
- **The more Blossom education people receive, the more confident they are about deciding how to feed their baby. They are also more likely to choose and stay exclusively breastfeeding (85% at 2 weeks and 100% at 6 weeks).**
- **At 6 weeks, 100% of people who had attended multiple Blossom classes felt they had the knowledge they needed to choose how to feed, 86% of people attributed this to Blossom**

Outcome 2: **Expectant parents will have the information and support they need to take care of themselves and their baby**



After Blossom classes, new and expectant mothers felt better informed about the birth of their baby, and more people felt they had the information they needed to look after themselves and their baby. People also felt they knew where to go for more support if needed.

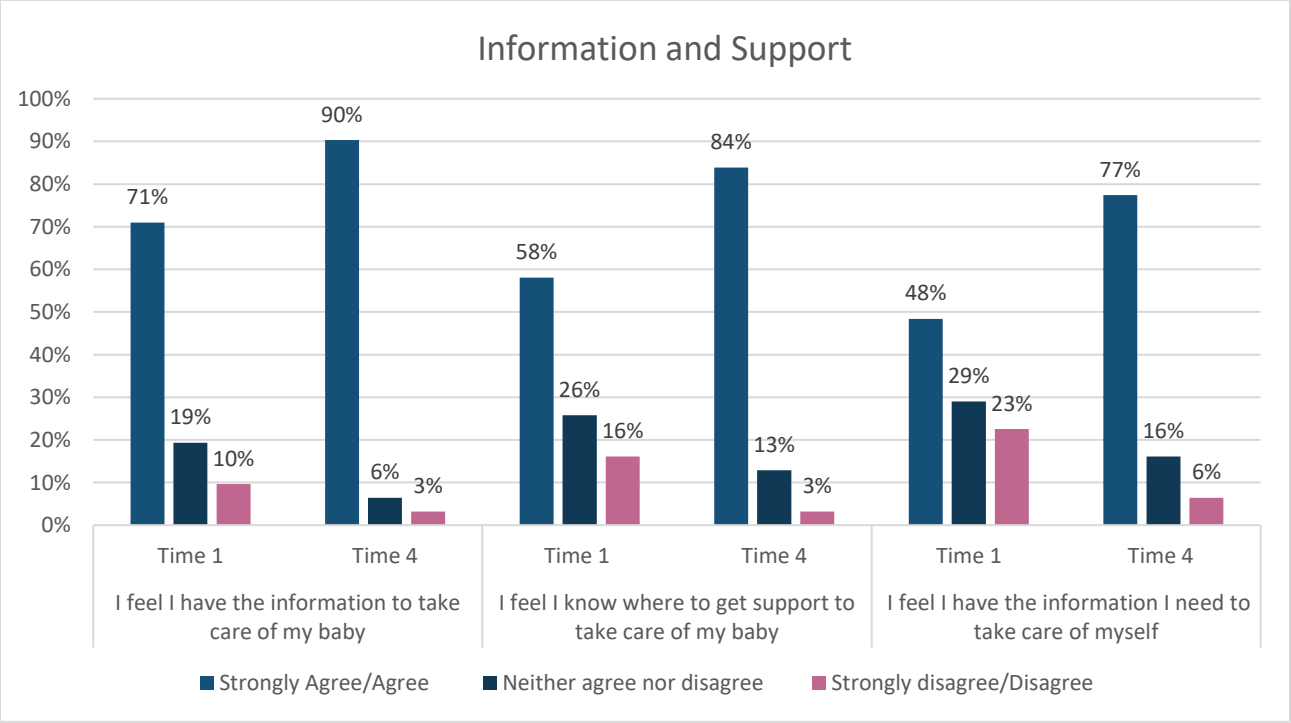
For the people attending the 4-week antenatal course, these increases in knowledge were greater:

- 100% of respondents felt they had the information needed about their baby's birth,
- 90% felt they had the information needed to take care of themselves and their baby and
- 90% reported they knew where to go for further support.

This improved knowledge continued to rise after babies were born. We tracked respondents who completed at least three surveys. 6-8 weeks (T4) responses were compared with responses before people started Blossom classes (T1).

Six weeks after their baby was born:

- 90% of respondents felt they had the information they needed to care for their baby after Blossom classes, a rise of 21%
- 84% felt they knew where to get support, nearly a third more than before
- 77% felt had the information needed to care for themselves, a rise of nearly 40%



For people with a 'high dosage', all of these figures rose to 100%. All Blossom supported mums felt they had the information they needed to take care of themselves and their babies, and knew where to go for more support.

The ***quality and usefulness of information*** was a key theme in interviews and open question responses. People went away from Blossom classes with resources, ideas and tips that they could easily put into practice. The fact that the information is evidence-based was important to people; it made Blossom a trusted source of advice.

Charlie attended the breastfeeding class and then the four-week course. She found all the information so helpful but found the advice about post-natal care particularly useful. She felt there was such a lot that was out of her control, but the Blossom session 'Bringing Baby Home' helped give her something tangible to do.

She reported:

"Although it might not go the way you want there are some things you can control like having your partner's support. The teacher talked about the support needed from my other half and the way it was spoken about making it a really lovely environment when you go into labour, and in labour and making it all relaxing. That was really helpful to me because it meant that I go and talk to my partner and say 'this is what I want from you this time round'"

The practical advice and suggested resources were mentioned by everyone in their interviews. This was advice that was remembered, stored and easily recalled when asked for examples of practical advice. For example:

"Packing the hospital bag and what was in it. Knowing what to look for and what to put in it - in terms of a little bit of food and some drink." (Interviewee 5)

In their learning conversations, Blossom teachers also identified getting high quality, practical information to huge numbers of people as core to Blossom's offer. They see the information as the starting point for people:

"They come in for information but actually they get a lot more. If that's what they want" (Blossom teacher 1)

Teachers described how Blossom helps to distil the vast range of information available into a digestible and helpful amount, picking out the most important bits:

"Blossom takes nuggets that are relevant, important and useful and gets across to people in huge numbers." (Blossom teacher 2)

In interviews, two thirds of people referred to the information they received **after** their baby's birth.

"A lot of the time it's all about like when you give birth but there's not that much talking about what happens immediately after. So, I found that really interesting. And useful." (Interviewee 1)

Blossom offers a range of 'support activities' which give expectant and new parents access to a digital community of support. These are regular weekly classes (a free relaxation session, pregnancy and postnatal yoga), other support sessions such as the free Blossom Baby Club, and support networks (WhatsApp groups).

For the people that attend these activities, they get practical relevant support from both from Blossom and from other parents who have babies of a similar age.

"I felt there was so much support there that we could go back and ask anything." (Interviewee 4)

"There was lots of information and a bit of a support network with the WhatsApp and knowing I could support the others as well; I was the only second time mum - that was quite nice." (Interviewee 4)

Because of the pandemic Zoe couldn't meet with other mums with babies the same age as hers. So, every Thursday she attends Blossom baby club. Most of the time she sees the same people every week. She says: *"It's a way, a place where you can hear some other things. The teachers give ideas and opinions, but they're clever at involving you in questions; they notice if everyone is joining in and encourage you to have a chat. It's a comfortable place to ask questions and I've picked up some really good ideas".*

Key messages about information and support

- **Blossom gives people the information they need to take care of their baby and of themselves** (90% of respondents felt they had the information they needed, a rise of 21%)
- **The four-week course had the most impact on knowledge gain immediately after attending sessions** (100% felt they had the knowledge they needed)
- **The more Blossom education people receive, the more knowledgeable and confident they are about taking care of themselves and their baby** (100% felt they had the knowledge they needed)
- **High quality, practical information is a core part of the Blossom Antenatal offer, and for many the starting point on their Blossom journey**
- **Blossom Antenatal offers on-going support, both before and after babies are born**

Outcome 3: **Expectant parents will feel positive about their baby**

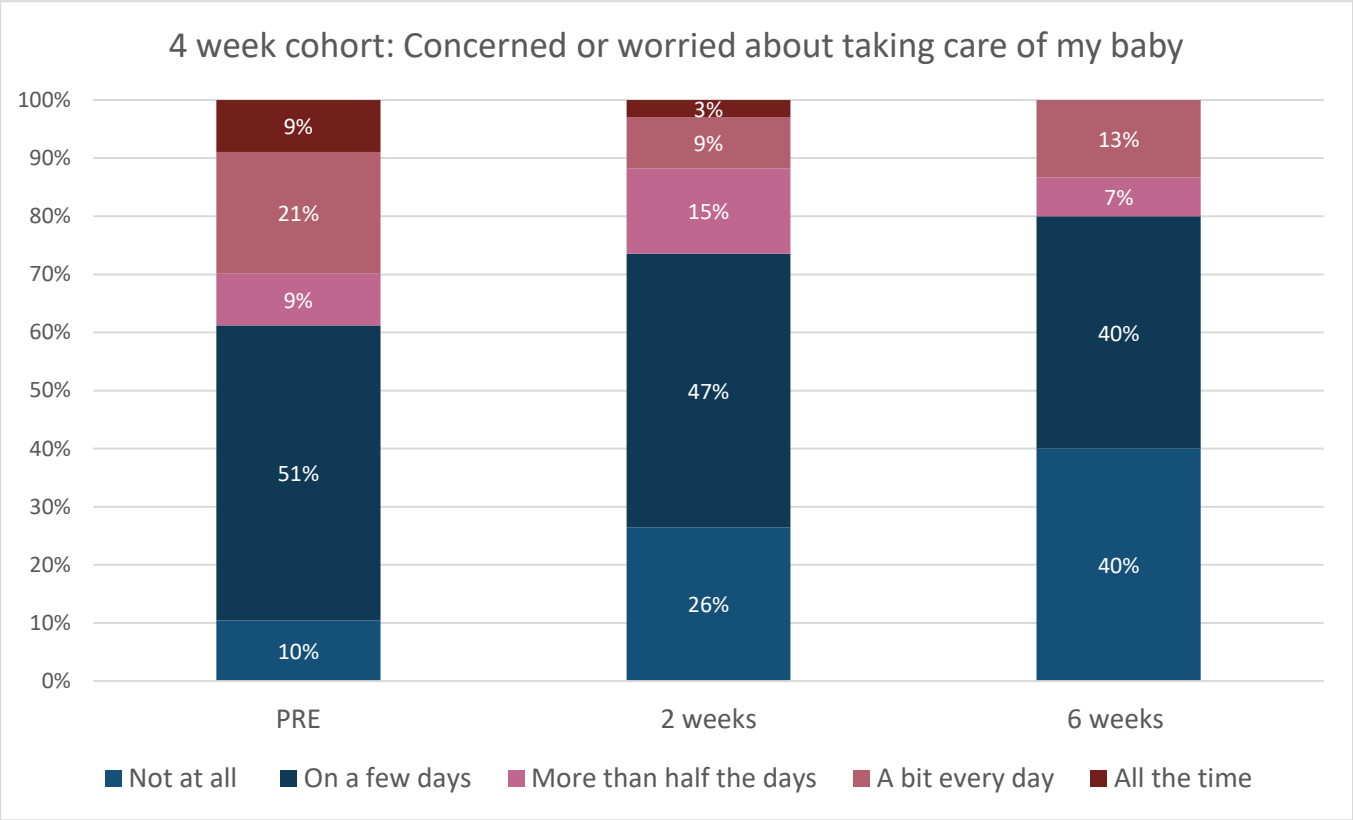
Before starting Blossom classes, most people reported feeling excited about their baby all of the time or most days (86%). 40% reported having concerns about taking care of their baby more than half of the time, and 34% had concerns about giving birth.

Immediately after attending sessions, there was very little change. This is expected as people may be completing surveys on the same day (before and after the course) and therefore wouldn't be feeling significantly different.

Comparing surveys at 6-8 weeks, a similar majority of people (92%) continue to feel excited about their baby. Interviews confirmed this.

"It's all going well now we've got used to a new life! He is just perfect." (Interviewee 4)

At 6-8 weeks there was a decrease in the number of people who had concerns about taking care of their baby. 35% of respondents said they were not at all worried compared to 19% before. Only 6% of respondents selected a bit concerned or worried every day compared to 23% before. These figures were enhanced for people attending the four-week antenatal course: a much higher percentage of respondents had no concerns or worries about taking care of their baby at 6 weeks than before they accessed Blossom education. In interviews, people attributed this to the support and information they had received from Blossom antenatal education.



Jane had trouble breastfeeding in the first few days but knew not to despair. She'd learned in the Blossom breastfeeding course about when the milk comes in and knew what signs to look out for in her baby. This really helped Jane feel on the ball, and not give up straight away.

The **on-going support** offered by Blossom also helps to counter any concerns new mothers have:

"I did the First Aid course a few days after he was born because choking is a phobia of mine; I get really scared. I had a bit of a fast flow of breast milk, so baby was coughing a bit. And I was panicking. The lady who did the first aid course really helped and I said to my husband I'll do it again when we come to weaning to give myself a bit of a refresher." (Interviewee 5)

Key messages about feeling positive and having concerns

- **Most expectant mothers feel positive and excited about their baby, and this continues after their baby is born**
- **The information and support offered through Blossom classes means fewer people have concerns or worries about their baby**
- **After the 4-week antenatal course concerns and worries reduced**

Outcome 4: **Expectant parents will feel connected and less lonely**

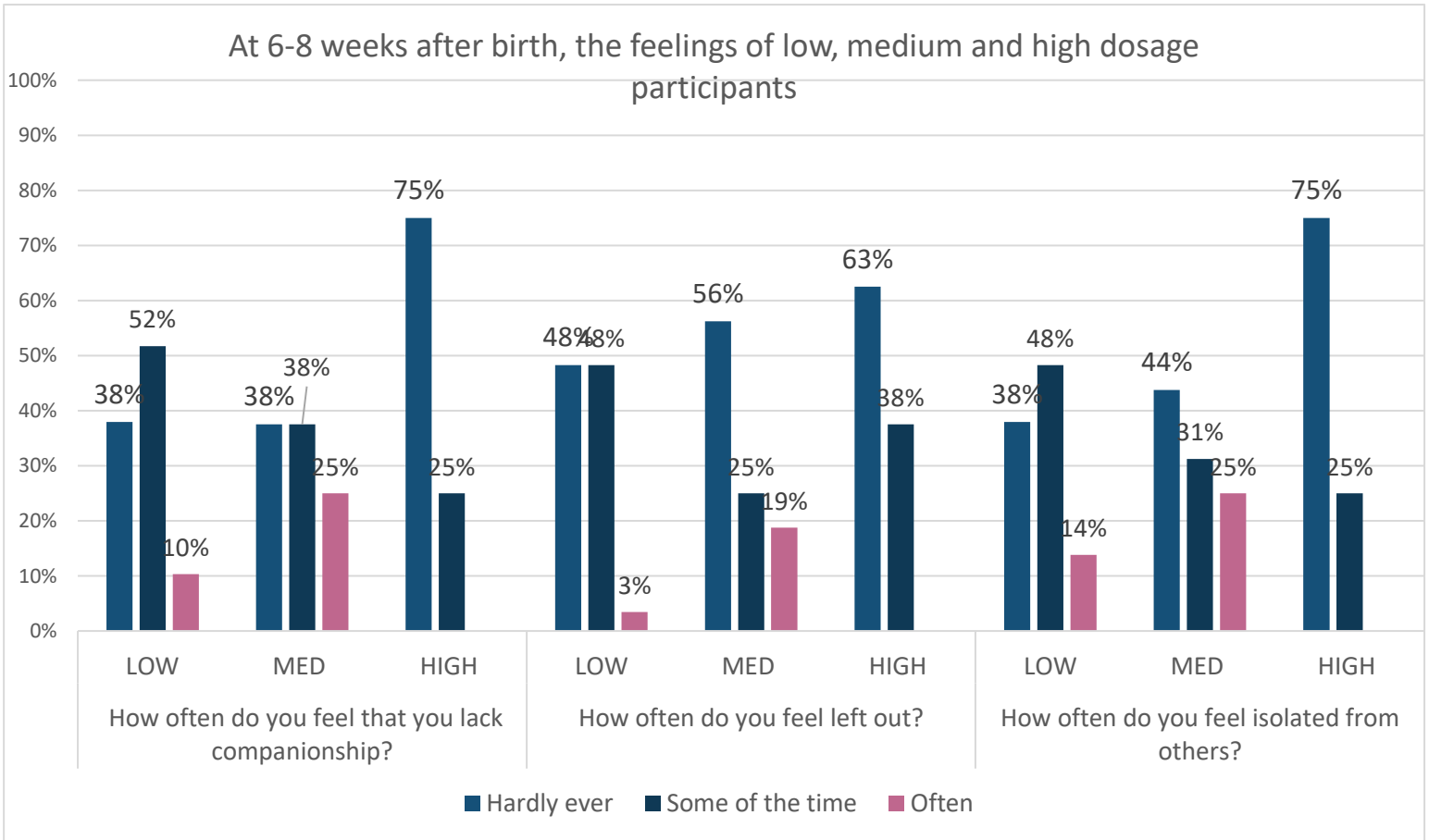
Before starting Blossom classes, 55% of survey respondents were not experiencing any feelings of loneliness. 15% felt lonely or isolated at least half of the time and a very few (1%) all of the time. Immediately after attending sessions, there was little difference, but this would be expected as many people would be completing surveys on the same day.

In the groups of people, we tracked from T1 through to T4 respondents reported higher feelings of loneliness and isolation 6 weeks after the baby was born. Aware that there are many factors involved in the loneliness new parents feel, we followed this up in interviews. For many, pregnancy was a time when they were able carry on with life, work, family - even during the pandemic. People explained why they felt lonelier after their baby was born; there is a huge shift from being at work to being at home with a 6–8-week-old baby:

"I wasn't lonely during pregnancy; I think I felt a bit more lonely now to be honest. When my husband went back to work, I felt really scared; I'm by myself" (Interviewee 5)

"Loneliness? no, pregnancy was great - I worked throughout, and carried on going to the gym. So didn't feel it until much later." (Interviewee 6)

Respondents who had a 'high dose' Blossom feel less lonely at T4 than the rest of the group.



In interviews, people talked about feeling less connected rather than lonely:

"No, not lonely, haven't felt lonely. I've had support from family and friends and partner At the moment because of the pandemic, I can't meet with other mums. My friends have babies with other ages, no other with new-borns" (Interviewee 2)

In many Blossom classes and activities, participants are encouraged to stay connected both with Blossom and with other mums: regular weekly classes (a free relaxation session, pregnancy and postnatal yoga), other support sessions such as the free Blossom Baby Club, and support networks (WhatsApp groups).

"The repetitive courses - relaxation, yoga, baby club, 4 week - there's much more fertile ground for fostering relationships." (Blossom teacher 2)

These are valued in giving them a huge network. The WhatsApp group following yoga sessions includes Blossom mums but also a wider group of antenatal yoga participants.

"there's a sense of community, there is one big WhatsApp group which includes Blossom mums. If someone has a question to ask, they will get loads of different answers - from people who are pregnant, who have had babies….an answer from someone who has had the same - a real support system through the WhatsApp" (Blossom teacher 2)

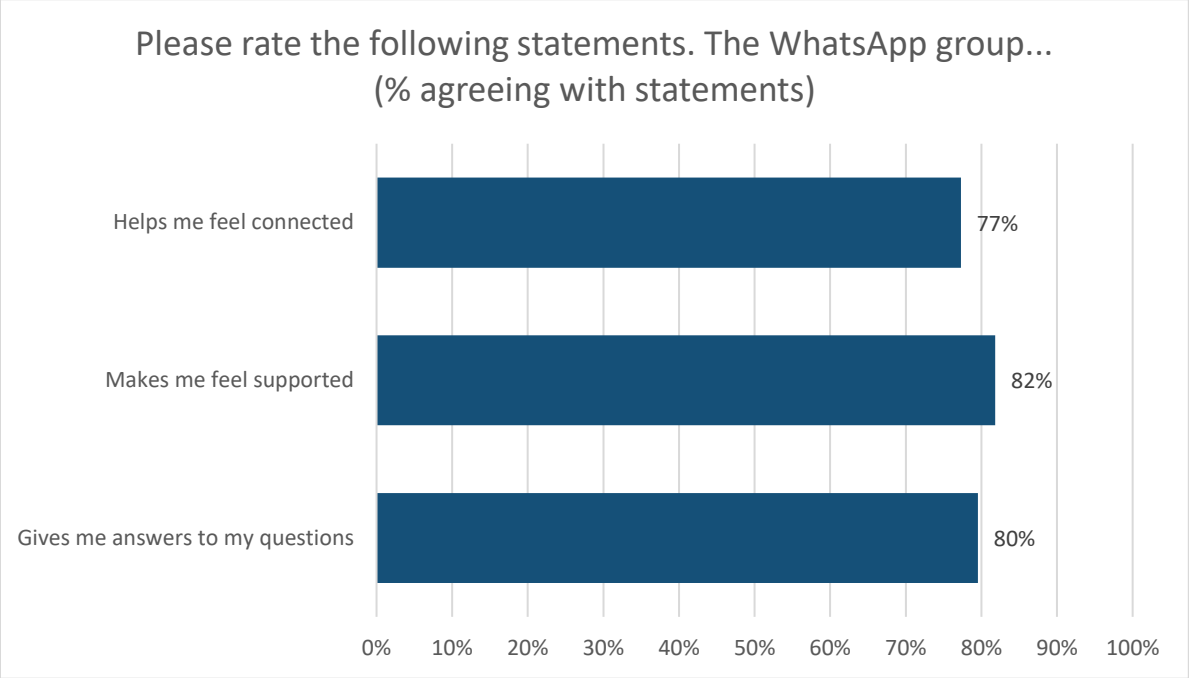
Sally came to the Blossom antenatal course and then attended the Blossom Yoga for Pregnancy class. She's now a regular attender and has joined the WhatsApp group. When her waters broke and nothing was happening, she had access to the Blossom teacher. Sally messaged as she was not sure what to do and used Blossom as a sounding board, asking questions like "this is happening…. is that, OK?" Sally also made friends with another woman who was due at the same time, they live apart but have stayed in touch and have now both gone back to relaxation class. Chatting on WhatsApp and the virtual support have really helped Sally to feel connected and confident.

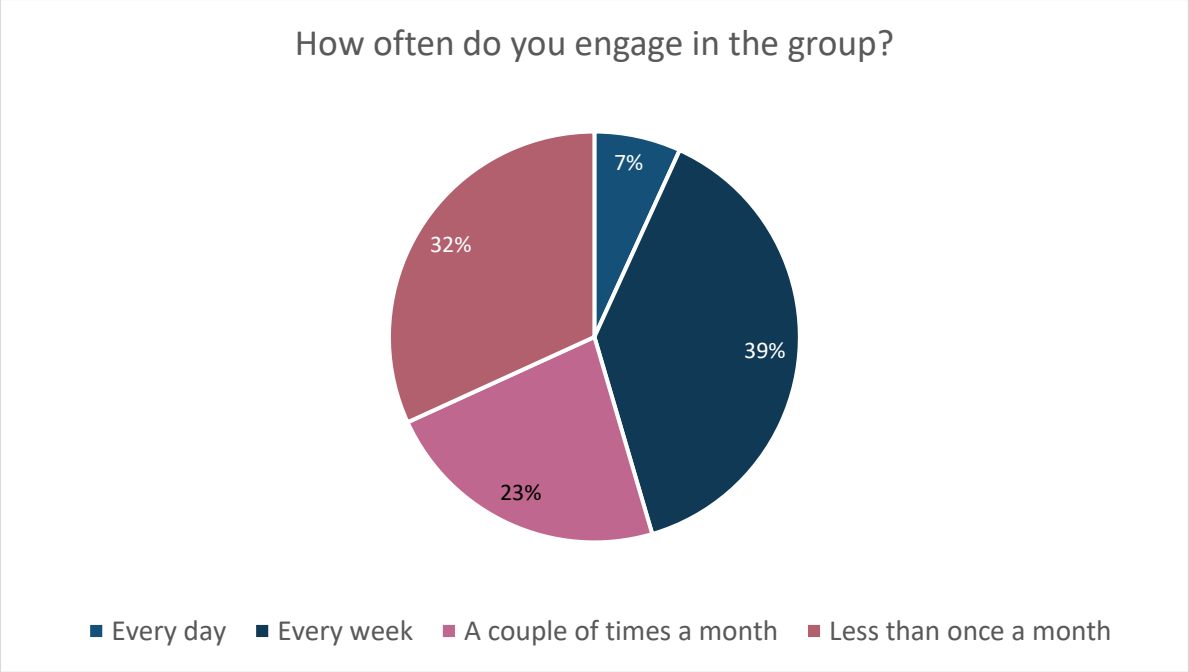
Only 26% of respondents attended other Blossom activities during pregnancy and only 15% once the baby was born. However, 72% say they either intend to return to Blossom or might return to Blossom. The interviews explored why there was limited take-up of these activities. For most people a lack of time was cited; people felt the classes were a reasonable price and there was plenty of choice. Some people already had a support network - or were starting to join face-to-face groups.

To find out more about the impact of Blossom support activities, a short survey was sent to people taking part in the WhatsApp groups, with 44 people responding. People stay involved for sustained

periods of time (39% for over 6 months and 98% for more than one month). They also contribute regularly: 46% of people contribute every week and 69% more than once a month. Respondents reported impacts of their involvement:

- 77% feel connected
- 82% feel supported
- 80% get answers to their questions





"It's just so brilliant and helpful to be able to be connected with other mums. Any question pops in my head, I just pop in the group and get an answer almost immediately" (WhatsApp survey respondent)

"It's so useful as there weren't any face-to-face classes to meet other mums with babies of similar ages so it makes you feel like you have a supportive group who are all going through it, and you are not alone" (WhatsApp survey respondent)

Iram had a strong network of friends but none of them had children and because of the pandemic affecting her Maternity Leave, she didn't get to go to many in-person baby groups. Iram had her baby in September 2020 and first joined the baby club in January 2021 - she's still regularly attending 14 months later! *"My support group is the Blossom Baby Club WhatsApp group, a group made up of amazing people who happen to be mums and I'll always be so grateful for this. I felt very alone and didn't have a great Health Visitor, Blossom Antenatal is a vital support system to new parents, wherever you are."*

Key findings about loneliness and feeling connected

- **There is limited evidence that attending Blossom classes makes people feel less lonely or isolated.**
- **There are indications that people attending more Blossom classes feel less lonely**
- **People report feeling lonelier 6 weeks after their baby is born, and disconnected from other mums with similar age babies**
- **Over ¾ (77%) of people taking part in Blossom support activities (such as the WhatsApp groups) say they feel supported and key to this is being able to communicate with mums of babies of a similar age**
- **When people join in Blossom support activities, they stay actively engaged**

Outcome 5: Following the evaluation **Blossom know the key features of their education model - what makes it work**

At each time point, participants were asked a range of questions in surveys and interviews to find out what was important to them about Blossom.

- At T1 (just before Blossom classes) they were asked why they were attending Blossom classes
- At T2 (immediately after Blossom classes) they were asked which statements they agreed with about Blossom
- At T3 (2 weeks after their baby's birth) they were asked what 5 things made Blossom successful
- At T4 (6-8 weeks after their baby's birth) asked what 5 things made Blossom successful

The priorities across all time points for people are summarised here:

T1 **Immediately before class**	**T2** **Immediately after class**	**T3** **2 weeks after baby's birth**	**T4** **6-8 weeks after baby's birth**
● Cost ● Content seemed interesting ● Accessible ○ Convenient ○ Right time	● Teachers ○ Knowledgeable ○ Non-Judgemental ● Accessible ○ Convenient ○ Choice ● Content, the information	● Accessible ○ Online ○ Convenient ● Teachers ○ Experienced ○ Warm ● Affordable	● Accessible ○ Online ○ Convenient ● Affordable ● Teachers ○ Experienced ○ Warm ● Information

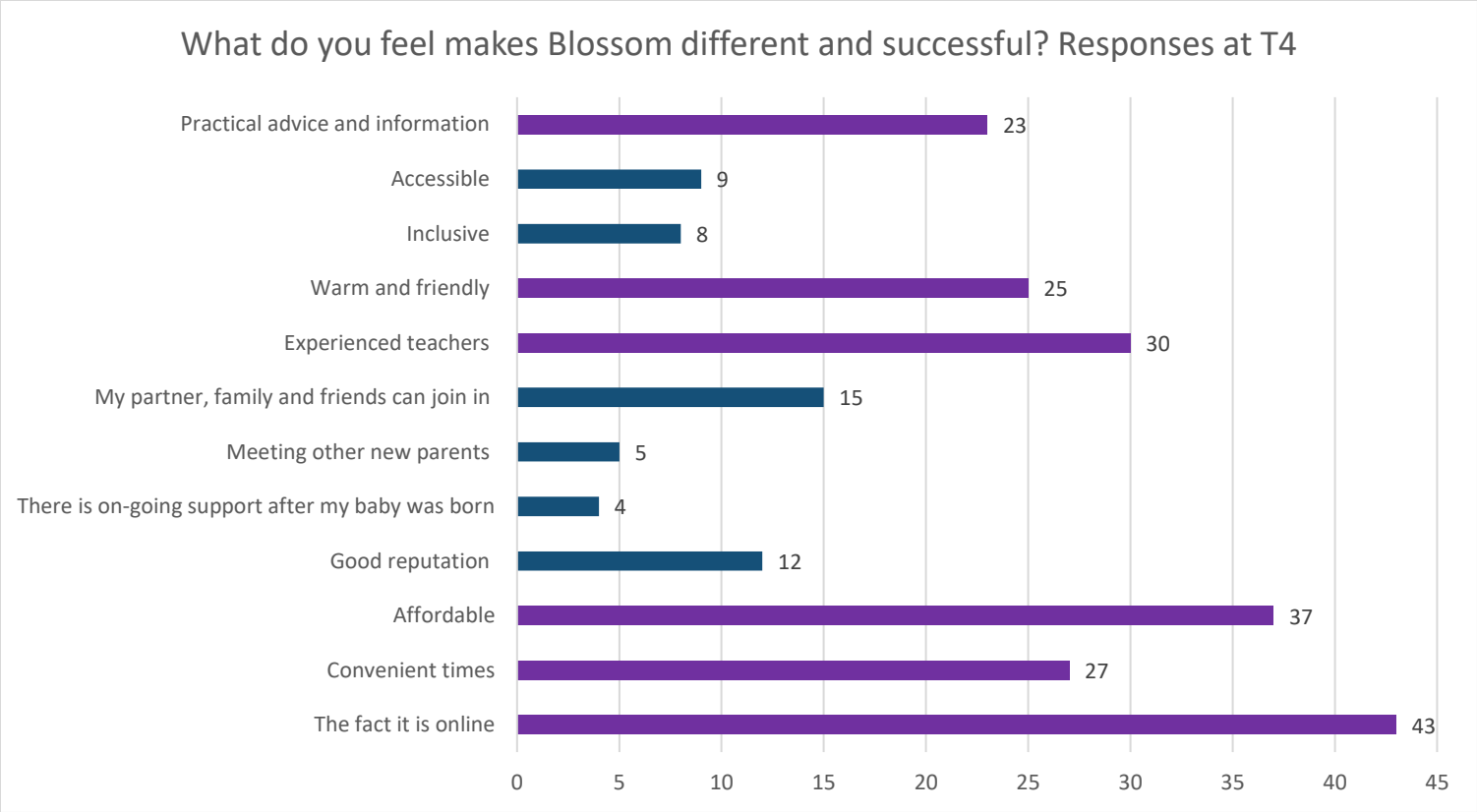
Interviews and open text question analysis confirmed these key themes.

At T2, people were asked to compare Blossom classes to other providers of antenatal education. This was an open text question in the survey and recurring themes were:

- **Accessibility and flexibility** – Blossom suits the lifestyle of expectant mothers, the fact that classes are online is important
- **More informative** – particularly the breastfeeding class, it is more in-depth
- **Better value for money**
- **More responsive/interactive** – easier to ask questions, more personal
- **Knowledge and professional teachers** – eager to listen, non-judgemental

Respondents felt other providers were preferable in relation to their ability to facilitate local networks, provide face to face education and, for some, their less 'formal' delivery style.

Results from the survey at T4 mirrored these themes:



Interview participants stated they chose Blossom antenatal for its convenience, accessibility and affordability, matching the responses from the surveys. When asked to identify what was unique and special about Blossom the key themes were:

- **Information**: High quality, evidence-based
    - Practical ideas, tips, things to look out for
- **The style**: Relaxed, friendly, non-judgemental,
- **Affordable** – many felt the classes to be value for money
- **The teachers** - Approachable, empowering, positive, encouraging, warm
- **Convenient**: Online – makes it so convenient, especially after baby is born
- Being able to **choose,** having a **'tailor-made'** personal offer

At T4, participants were asked to compare Blossom with other antenatal providers. The aspects where people scored Blossom highest as being better were:

- Being able to **choose a range of courses that suit me**
- Being able to find a time that suits me and my family
- Offering services that other providers don't*

*Interviews showed that the weekly, on-going sessions which carried on after babies were born were valued.

Zarah googled online courses and saw the Blossom breastfeeding course was free, so she signed up for that. *"I actually did it twice - again later on as a refresher."* Zarah did the labour and birth course, and the sleep course before her baby was born. Then afterwards she joined baby massage. Now that her baby is 8 weeks old, Zarah heard in an email from Blossom about the *soothing your baby* class which sounded just what she needed. She's also planning on doing the weaning course when her baby is ready.

Key findings about key features of Blossom

- The **accessibility** and **affordability** of Blossom classes are important to participants throughout
- The **knowledge, experience, warmth** and **practical advice** become more important as time goes by and the more involved people get.
- The **range** of classes, and ability to **select just what is needed and when** was highlighted as unique to Blossom.

Outcome 6: Following the evaluation **Blossom understand which level of input makes the most impact**

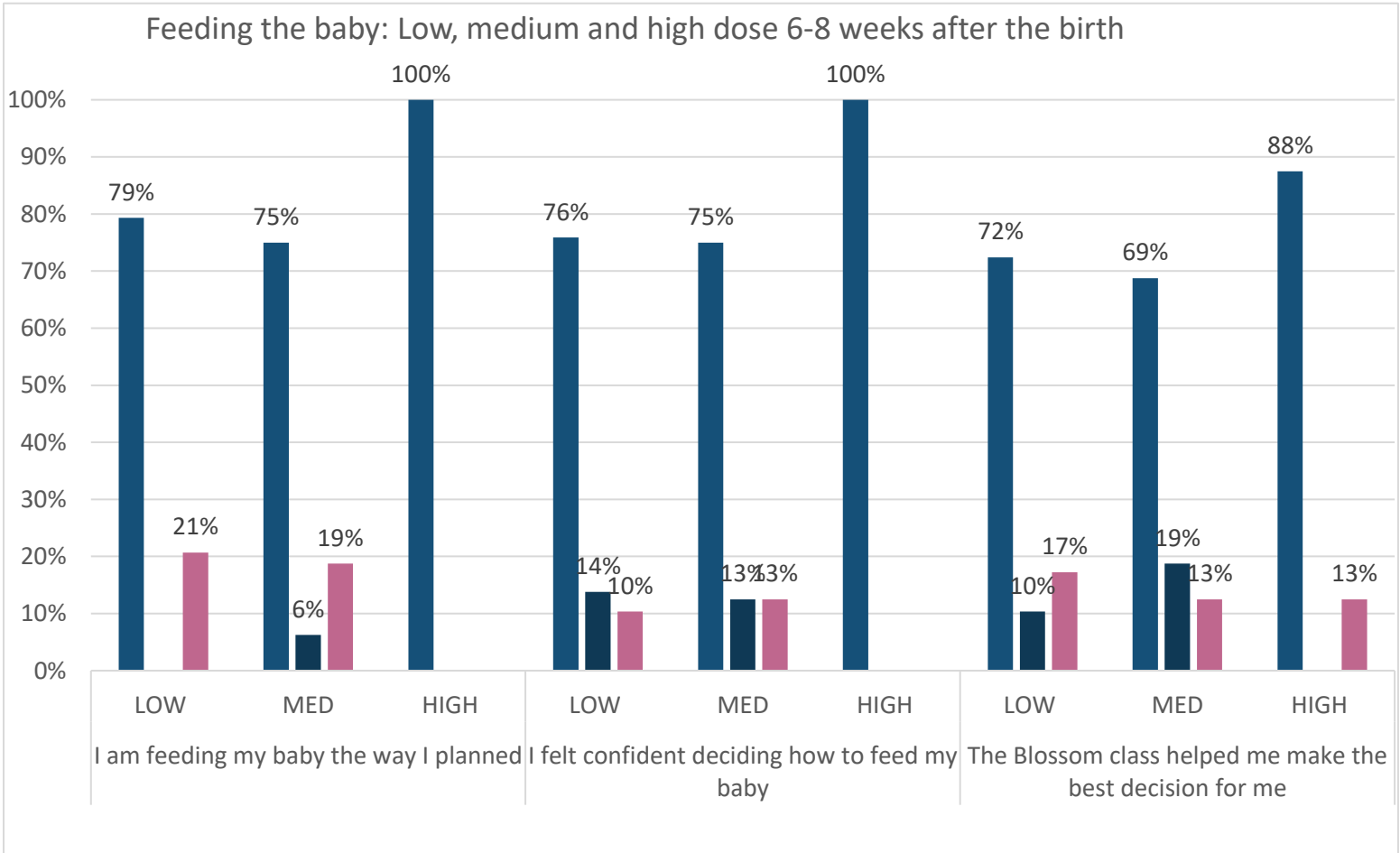
Analysis suggests there are benefits to those people who attend more Blossom classes and activities:

- **The four-week course had the most impact on knowledge gain.** After the 4-week antenatal course, increases in knowledge were greater than other classes.

Respondents who completed the 6–8-week survey were divided into groups according to their 'dose' of Blossom - how much they engaged with Blossom (see page 9)

People with a high dose of Blossom:

- Were **more likely to feed their baby the way they had planned** (100% compared with 79% of low dose respondents and 75% of medium dose respondents)
- Felt **more confident deciding how to feed their baby** (100% felt confident compared with 76% of low dose respondents and 75% of medium dose respondents)
- Were **more likely to attribute Blossom as helping them to make their decisio**n (88% compared with 72% of low dose respondents and 69% of medium dose respondents.)
- Were **more likely to be feeding their baby exclusively breastmilk** at 6-8 weeks (100% breastfed exclusively compared with 55% of low dose respondents and 63% of medium dose respondents)
- Were **more likely to feel confident in being able to care for themselves and their baby, and in knowing where to get support** (100% of high dose respondents)
- Were **less likely to feel lonely**: left out, to lack companionship or to feel isolated from others.



A key differential in the dosage seemed to be engagement in activities **after their baby was born**. Interviews showed that engagement in **support activities** such as the WhatsApp group, weekly classes such as relaxation or Blossom baby club is also important.

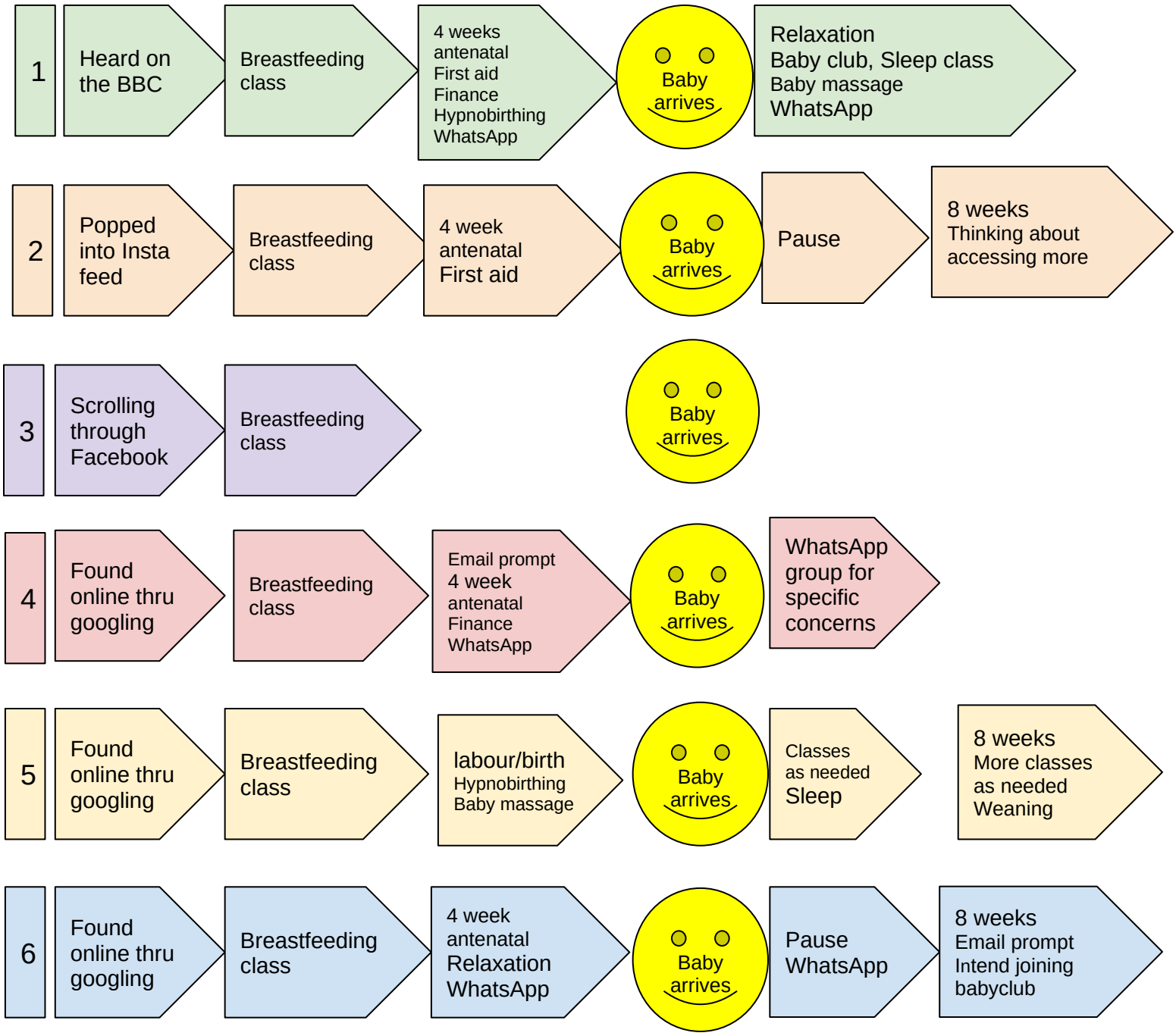
The WhatsApp group survey analysis strongly suggests that engagement in this social media platform helps people to feel connected and supported on an on-going basis.

Key findings about 'high dosage' Blossom clients

- **The more Blossom classes and activities people access, the more confident they are in looking after their baby and themselves.**
- **The more Blossom people access, the more likely they are to exclusively breastfeed their baby** 100% compared with 63% (medium) and 55% (low)**, and to feed as they had planned to** 100% compared with 75% (medium) and 79% (low)**.**
- **The more Blossom people access, the less likely they are to feel lonely and disconnected.**
- **Key to these enhanced benefits of engagement with Blossom postnatally and engaging in 'support activities' such as WhatsApp groups or weekly repeat activities.**

Outcome 7: Following the evaluation **Blossom understand typical Blossom journeys**

Each person interviewed had a different Blossom journey, but there were key similarities:



Key features:

- People come to Blossom through a variety of routes - in this sample they were all online, and a third came via social media
- **All journeys started with the free breastfeeding class**. There, they receive high quality in-depth information for free.
- For many, this is where the journey ends, but people moved on from this either because they were impressed with the quality, wanted more and were prepared to pay for it, or they received an email prompt. **Emails come at just the right time**.
- People take a range of classes before their baby is born, and half of interviewees joined **WhatsApp groups which gave them on-going support** throughout the birth and postnatal period.
- After their baby is born those who have joined WhatsApp groups continue to be engaged, but for half of interviewees there is a pause. People say they have no time, they need to establish a routine.
- **Around 8 weeks**, people who have not accessed Blossom activities after their baby's birth **start to think of re-engaging**. Email prompts help. They intend to **access the support which is needed at that time** e.g., sleep, weaning, first aid.

Immediately after their initial Blossom class, 85% of people reported that they intended accessing more Blossom. However, at 6-8weeks, only 26% had attended other Blossom activities during pregnancy and only 15% once the baby was born.

This was explored in interviews. Time was the main factor for not staying engaged, as well as the competitive market.

"I do think the Blossom is worth the money but there is a lot of competition". Interviewee 3

"For me, I want to but can't find the time. All the information you get, and the prices are all great (Interviewee 1)

"I think it's just finding the time to do that - a big thing for me. Although they [they classes] are at good times, now the weather's changed and places are open again, it's about getting out and about with baby." (Interviewee 4)

In their surveys at 6-8 weeks, 72% say they either intend to return to Blossom or might return to Blossom. At the time interviewees were selected, many had indicated on their 6–8-week survey that they had not carried on with Blossom. By the time they were interviewed - around 8 weeks postnatally, they were starting to re-engage. This suggests there is a 'right time' for some people to re-engage.

"About the right time after 6 weeks. He's got a slight routine; I've got to grips." (Interviewee 1)

Emails from Blossom were noted as being useful prompts. People felt the content of emails was useful, and there were just about the right amount of them.

"The emails from Blossom - prompted me to think about something else". (Interview 1)

"Emails? Good to know what new courses are on, really helpful. I don't think there are too many - it's just right" (Interviewee 6)

The Blossom journey - key findings

- **All Blossom journeys start with the free breastfeeding class**
- **The low/no cost and accessibility are key reasons for starting the journey**
- **The journey continues because of the high-quality information**
- **After their initial classes, 85% of people indicate they will access more, but the majority don't.** Only 26% of respondents attended other activities during pregnancy, and 15% once their baby was born
- **WhatsApp groups provide on-going support from peers and Blossom**
- **Around 8 weeks after the birth of their baby, people are ready to re-engage**
- **The content and timing of emails from Blossom help keep people engaged**

Outcome 8: Following the evaluation **Blossom have a series of statistics and messages that can be tailored to meet the needs of specific funders**

At the end of each section of this report, and in the executive summary there are key findings, quotes and case studies. The evaluators have also collated further anonymous quotes and case studies under each of the key themes.

Discussion

Strengths and limitations of this evaluation

The responsive, collaborative design of this study has meant that its investigation is focused, and there has been opportunity throughout to 'dig down' into emerging themes or respond to Blossom's needs in a timely way.

However, this is not a piece of rigorous experimental research, it is an evaluation using a longitudinal design. So responses are compared before and after Blossom, but it is not possible to say that the changes are definitely as a result of what Blossom offers. The fact that data is triangulated with interviews and learning conversations helps to add rigour. It also means the findings about the high dosage group in particular can be corroborated.

This survey- and interview-based evaluation explored the experiences of expectant and new mums accessing Blossom antenatal education, however:

- Sample sizes were small. Although there was a large sample at T1, the number who were tracked through to T4 was small.
- As survey respondents were invited to say whether they could be contacted for an interview, this sample was skewed towards people taking part in the 6-8 survey who were likely to be more positive towards Blossom, and likely to be 'high dosage' Blossom clients. This did mean, however, that we were able to find out more about high dosage people.
- The WhatsApp survey respondents were similarly self-selected.
- Although the survey was open to anyone participating in a Blossom class (birth partners, dads, family members) the vast majority who replied were expectant and new mums. We are therefore not able to report any findings on how Blossom impacts on the family more widely.

How is Blossom's online offer different?

With their online offer Blossom provides something different to traditional antenatal classes, but in a similarly impactful way.

It's well-known that pregnant women are highly motivated to seek out information, increasingly they can get this online[12], and this has been particularly important during the pandemic when face to face classes have not been available. A range of options exist, as many other antenatal providers quickly moved online during the pandemic. However, many, notably the NHS offer, offered pre-recorded sessions rather than live interactive classes. Best Beginning's Baby Buddy is a pregnancy and parenting App described as being a backup to frontline practitioners' work. Again, this lacks the interactive

[12] Internet use by pregnant women seeking pregnancy-related information: a systematic review

element that Blossom provides though evaluation showed it provided support in 97% of users.[13] There is also an increasing number of pregnancy and parenting websites and blogs[14] which are a source of practical information.

Perhaps more similar is Facemums, a professionally moderated closed Facebook group initiative funded by Health Education England providing expectant mothers in England with access to additional support from both qualified NHS midwives and other pregnant women - before and after birth. A study found Facemums was well placed to provide online antenatal care and support during the COVID-19 pandemic[15], by creating virtual communities of care.

There is evidence for the effectiveness also of the digital community that Blossom creates, offering new mums' information, support and a connection with others. Parents feel supported, get information and feel connected to others at a similar stage in their pregnancy or parenthood. While other online forums such as FaceMums have shown to be a vital source of information and support from medical professionals[16] during COVID-19, the connectedness described by Blossom WhatsApp group users seems stronger for Blossom as participants have actually attended the same classes and been taught by the group moderator/facilitator.

Where Blossom seems different is the way it offers a combined offer of online interactive classes, weekly on-going classes and on-going support through curated WhatsApp groups. It offers classes that participants report they cannot access elsewhere (for example Motherless mums).

Overall, Blossom's **online antenatal education and support works**. Blossom online antenatal education provides high quality information and increases parental confidence in looking after their baby. 90% of survey respondents said they had the information they needed, rising to 100% in those who undertook the four-week antenatal course. This compares favourably with evaluations of face-to-face antenatal education, with 98% of people feeling 'confident' or 'fairly confident' after NCT antenatal education[17]. It also compares favourably with more a robust evaluation of an antenatal education programme (Solihull) which showed it decreased anxiety about looking after their baby in new parents[18]. In the same way, 88% of Blossom WhatsApp users felt they got answers to their questions, comparing well with Facemum survey result which shoed 82.5% agreeing they had access to pregnancy related information.

[13] https://www.bestbeginnings.org.uk/evidence-impact-and-evaluation
[14] https://www.healthline.com/health/pregnancy/best-blogs-of-the-year#3
[15] Chatwin et al (2021) Experiences of pregnant mothers using a social media based antenatal support service during the COVID-19 lockdown in the UK: findings from a user survey. BMJ
[16] at a similar stage in their pregnancy or parenthood
[17] NCT (2011) Preparing for Birth and Parenthood
[18] Douglas et al 2017 A service evaluation of the Solihull Approach Antenatal Parenting Group: integrating childbirth information with support for the foetal-parent relationship Evidence based midwifery 15 (1)

Will Blossom's online offer still be relevant post-pandemic?

The pandemic saw a rapid shift to online services and education for expectant and new parents, by necessity. But online support did exist before. Initiatives such as FaceMums and the Babybuddy App were already useful sources of information. The pandemic provided new opportunities, and the chance to refine education approaches - and Blossom was at the forefront because it moved swiftly to create those opportunities.

There is a general acceptance in the field of education that online, remote learning has been effective during the pandemic and is here to stay - but combining it with face-to-face contact as well. Blended learning, where the best elements of each are kept, is increasingly seen as a viable and impactful solution.

For antenatal education this may also be the case. This evaluation has shown the impact of the online model, and how it compares favourably with face-to-face sessions. A pure online model will not provide the local networks that face-to-face education does, but for Blossom teachers this aspect has been liberating, giving them the chance to really focus on providing high quality information and support:

"So, refreshing to be able to have contact and share knowledge with a group of people that are so diverse …. without pressure as a facilitator to create a self-supporting group". (Blossom Teacher 1)

Many people, both in surveys and interviews, have commented on the quality of Blossom classes, but also on their accessibility. The majority of comments are not related specifically to access-issues during the pandemic.

"I enjoyed the Blossom virtual set up and focused topic of this session. The 1.5-hour duration is ideal as it's a manageable amount of time to schedule into the day". (Interviewee 6)

"It's a godsend if you've been told not to leave home" (Blossom teacher 2)

"Especially postnatally when you can't leave the house very easily with your baby." (Interviewee 6)

"Will recommend the convenience of doing it from home. You don't have to leave the baby and go somewhere else, it's convenient - and affordable." (Interviewee 6)

The benefits of online education were also highlighted in relation to learning styles:

"It makes it relevant for lots of people - particularly those who are neuro diverse. With the screen, you don't have to chat, can turn off if you want, you can take screenshots and ask questions, you can put questions in chat - it takes away the need for confidence." (Blossom teacher 1)

"The Blossom course was nice in that it encouraged people to be on camera, but I found my anxiety quite bad on the day of the class so didn't turn on my camera." (Survey respondent)

As with other approaches, it doesn't suit everyone. Some people commented negatively on having cameras on, for example, while others liked the 'friendliness' of being able to see everyone. For most people though, Blossom online education gave them something to compliment other ways of getting the information and support they need. Just as providers are thinking about a 'blended offer', so participants are choosing their own blended learning package:

"I wouldn't stop doing the online courses just because I'm going back to groups, and vice versa. I like both". (Interviewee 4)

If I had a choice to go to a face-to-face group, I would. But I am going to try the baby club. And if it fits then I'll do it (Interviewee 5)

Does Blossom fill a gap in the market?

Survey results and interviews showed that expectant parents were looking to Blossom for information and to have their questions answered. Is this different to what people look for in other providers?

While 96% who booked on to an NCT course wanted to prepare for becoming a parent, 97% of women did so to meet other parents[19]. Blossom does offer a support network for prospective and new parents, and this is rated as highly effective in linking up parents at a similar stage in their pregnancy or parenthood. But this is not at a regional level, nor face to face.

Most Blossom clients come for different reasons, and these vary. Many people cited the fact that they can choose just what they want, when they want it as a strength. In interviews, people shared their thoughts on what they were likely to want to do at different stages. For example, some people repeated classes to get a refresher, some were waiting until their baby was ready to move to solid foods before they took up the weaning class, one mother was concerned about her baby choking and so did the first aid course.

NICE guidance on antenatal care[20] includes providing clear, understandable and timely information *taking into account women's individual needs and preferences*. Blossom does just this.

Choice and personalisation for maternity services are NHS commitments[21]. The fact that Blossom offers people the opportunity to choose exactly what they want, at the time they want it, and not commit to coming back each week is a strength.

[19] NCT (2011) Preparing for Birth and Parenthood
[20] NICE guidance on antenatal care
[21] https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/

"When someone who knows that have a planned caesarean, they may come to another provider and know they have to sit through several hours of talking about hormones and the start of labour and how to cope and pain relief and all the stuff which might be relevant if labour start unexpectedly or if they're going to have another baby….but if they don't want to sit through it, with Blossom, they don't have to. They just go to a caesarean workshop and all the stuff on baby care - great. "(Blossom teacher 2)

Bespoke antenatal classes do exist as private, individual paid-for sessions. But the ability to tailor Blossom's free or low-cost offer to meet individual needs makes Blossom fairly unique in a competitive market.

How important are Blossom's key features?

Our evaluation has shown that the accessibility Blossom offers is a key feature, and it's possible that Blossom's online offer is pretty unique - see above. But what matters to people who stay engaged with Blossom is the **high-quality information** it provides. This is particularly important at the moment.

A 2021 CQC survey found that the number of women reporting they had time to ask questions or discuss pregnancy with their midwives had a statistically significant decrease compared with 2019. Similarly, the proportion of women to say that during their pregnancy midwives 'definitely' provided relevant information about feeding their baby has decreased from 57% in 2019 to 52% in 2021[22].

The **information and support for breastfeeding** provided by Blossom Antenatal is rated particularly highly, and for many the free breastfeeding course is their springboard on to other classes. Given the current UK policy is to promote exclusive breastfeeding (feeding only breast milk) for the first six months of an infant's life, the high rates of blossom supported mums who do this is important: 68% of Blossom mums compared with 48% nationally.

Again, the impact of Blossom classes compares favourably with other providers. Blossom education really helps expectant parents feel positive about feeding and compared well with other programmes. 79% reporting to be confident feeding their baby, and 74% attributing their decision to breastfeed to Blossom. In a similar survey with NCT supported mums, at 3 months old 80% of women said the information on breastfeeding provided on their course had been useful.

[22] CQC 2021 https://www.cqc.org.uk/cqc_survey/5

Keeping people engaged with Blossom is crucial

The benefits of a bigger 'dose' of Blossom come through strongly in this evaluation. The more engaged people are with Blossom, the more confident they are about deciding how to feed their baby, more likely to choose and stay exclusively breastfeeding, more knowledgeable and confident about taking care of themselves and their baby and less lonely.

Encouraging people to take part in the 'support activities' which provide on-going support which **continues after the baby is born** seems crucial. This is something that Blossom does well and is much needed.

"A lot of the time it's all about like when you give birth but there's not that much talking about what happens immediately after. So, I found that really interesting. And useful." (Interviewee 1)

The fact that Blossom antenatal offers support postnatally as well as antenatally is important, especially as people can find it harder to access postnatal support. The 2021 CQC maternity survey showed a decline from 71% in 2019 to 60% in 2021 in the number of women who said that in the six weeks after the birth of their baby, they 'definitely' received help and advice from health professionals about their baby's health and progress. As well as this postnatal care satisfaction is an issue, with only 53% of women satisfied with postnatal support compared with 83% in relation to antenatal[23]. The same study found that women received snippets of information from different sources rather than cohesive, comprehensive information about postnatal care.

Our evaluation finds that there is a critical time for re engaging new mums, and that this is around 8 weeks after the birth of their baby. At this time, they are beginning to establish a routine and have more time to think about getting involved. They also, at this time, report more feelings of loneliness or disconnection.

Loneliness or disconnectedness?

There is a lot written about loneliness during pregnancy and early parenthood. In our surveys, we found very few people reporting feelings of loneliness when they started attending Blossom classes (4% reported feeling lonely at least a bit each day). Our surveys showed that people felt lonelier 6 weeks after their baby was born. In interviews this was explored. People had carried on with their busy lives during their pregnancy and were generally feeling lonelier once they were at home with their babies.

This is discussed in more detail on page 25. What was also interesting was the distinction people made between feeling lonely and feeling a separation from mothers of babies of a similar age. Blossom's WhatsApp groups all follow on from a class or group activity which means they are with mums at a similar stage to them. WhatsApp groups have been shown to provide connectivity even when this is done digitally.

[23] https://www.npeu.ox.ac.uk/maternity-surveys

"It is the people I attended the course with, and everyone is going through the same things with their babies at around the same time." (WhatsApp group survey respondent)

"My favourite class is relaxation hour. I feel part of a community there even though I have never met anyone face to face. It is a highlight of my week with my new baby and was so throughout pregnancy too". (Interviewee 2)

Conclusions and recommendations

Blossom provides high quality and impactful education for expectant and new mothers. The more people access, the bigger the impact on knowledge, confidence and on feeling connected.

Blossoms online model has provided a lifeline during the pandemic when face to face education and support was impossible. However, post-pandemic, this model remains relevant and effective. It makes antenatal education accessible and convenient, providing the information needed in a way that is meaningful to participants.

Although only a minority of Blossom customers stay engaged over a sustained period, those that do reap the benefits both in confidence but also in the support Blossom provides before and after the birth of their baby. Despite there being limited evidence for Blossom's impact on loneliness in new mums, it does provide an effective digital community of support for them.

Encouraging people who access Blossom to access more and to take part in the whole Blossom model is key to ensuring maximum impact moving forwards. We recommend:

Maintaining the key features of the core Blossom offer - high quality evidence-based information, knowledgeable and experienced teachers and the ability for participants to 'tailor make' their own bespoke antenatal and postnatal package.

Maintaining the online delivery model - this is highly valued as making ante and postnatal education accessible and convenient. For some people it has been the only way they have accessed antenatal education. It may be that a hybrid model of some face to face as well is the way forwards, but the online element is key. Blossom does this extremely effectively.

"I think at Blossom we really need to take the best bits of Blossom and keep a lot of stuff online as well as face to face." (Blossom teacher 1)

Considering ways of keeping people engaged beyond the breastfeeding course, but also postnatally at around 8 weeks when people are ready for more. Use the journeys of typical Blossom customers to see where there are key moments.

Developing existing and new wider 'support activities' such as weekly relaxation or yoga, and digital communities of support through Blossom baby club or WhatsApp groups. These provide effective peer support networks and are key to the enhanced impact Blossom can make.

Maximising the emails - people find them just right

Exploring how to convert attendees on free courses into paying customers Although affordability and the low (or no) cost of the breastfeeding sessions draws people to Blossom, the majority do not continue their journey and take up more classes. The messages from this evaluation show the value of more and continued engagement.

Mary Hartshorne and Rachael Black

Appendix 1

Short pre-class survey

Thank you for registering with Blossom, we're excited to have you on board!

Before you start your class, please complete our short survey. This will help us measure the difference we make to expectant parents. There are just 4 questions. We don't need your name and will only share your answers with our evaluation team and researchers from the Royal Holloway University of London. We won't be sharing anything with anyone else. You can find out more about our evaluation by emailing blossomevaluation@gmail.com

Your feedback will help us provide the best quality classes and information. By completing this survey, you are consenting to be involved in Blossom evaluation.

Before our questions - we'd like a bit of information

Age (please select from the following options)
16 - 18-year-olds
19 - 24-year-olds
25 - 29-year-olds
30 - 34-year-olds
35 - 40-year-olds
40 + years old

Are you
The expectant mother
Partner
Family member
Other (please state)

Postcode:

Which of these best describes your ethnic group?

- White British
- White - other (please specify below)
- Mixed
- Asian/Asian British
- Black/Black British
- Other (please tell us which)

Do you consider yourself to have a disability Y/N?

Name of class you are attending …….

Now the questions

1. What made you choose a Blossom antenatal class? Please tick many as you want

    - ○ The content looked interesting
    - ○ It was the right time for me
    - ○ It's convenient
    - ○ The cost (or no cost!)
    - ○ My partner can join in
    - ○ It's the only service I can access
    - ○ Something else - please tell us what

2. Please rate the following statements from strongly disagree to strongly agree

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel I have the information I need about the birth of my baby					
I feel I have the information to take care of my baby					
I feel I know where to get support to take care of my baby					
I feel I have the information I need to take care of myself.					

3. **We would like to know more about how expectant parents feel about having a baby.** Think about the last 2 weeks. Tell us how often have you experienced the following feelings:

	Not at all	On a few days	More than half the days	A bit every day	All the time
Concerned or worried about giving birth					
Concerned or worried about taking care of my baby					
Concerned or worried about bonding with my baby					
Feeling low					
Feeling lonely					
Feeling excited about my baby					

Please indicate how often each of the statements below is descriptive of you

	Hardy ever	Some of the time	Often
How often do you feel that you lack companionship?			
How often do you feel left out?			
How often do you feel isolated from others?			

4. **Feeding your baby**

I plan to feed my baby

- Exclusively breast milk
- A combination of breastmilk and formula (known as mixed feeding)
- Formula milk only
- Undecided

I feel I have the knowledge I need to choose how to feed my baby

- Yes
- No
- Not sure

I have concerns/worries about feeding my baby

- Yes
- No
- Not sure

Thank you for helping us. Enjoy Blossom class!

Survey - within 2 weeks of giving birth

Congratulations on the birth of your baby!

Answering a few questions will really help us show the difference Blossom makes. Please take a few minutes to complete this short survey

By completing this survey, you are consenting to be involved in Blossom evaluation. We won't be sharing anything with anyone else. You can find out more about our evaluation here

Before our questions - we'd like a bit of information

When was your baby born (DD/MM/YY):

Age (please select from the following options)
16 - 18-year-olds
19 - 24-year-olds
25 - 29-year-olds
30 - 34-year-olds
35 - 40-year-olds
40 + years old

Are you
Mother
Partner
Family member
Other (please state)

Postcode:

Which of these best describes your ethnic group?

- White British
- White - other (please specify below)
- Mixed
- Asian/Asian British
- Black/Black British
- Other (please tell us which)

Do you consider yourself to have a disability Y/N?

Now the questions

1. **Please tell us a bit about you and Blossom**

- Which class(es) did you attend?

- Have you attended or participated in any other Blossom activities? Y/N

- If yes what

    - The Instagram Q&A
    - Joined a WhatsApp group with other parents
    - Contribute regularly to WhatsApp group/Insta
    - Continued to attend sessions now your baby is born (e.g., the relaxation group, Blossom Baby Club)
    - Accessed the Breast-Feeding space
    - Attended Blossom's Mental health sessions

If no, do you intend to? Y/N

- Has anyone else in your family taken part in Blossom activities
    - Relatives
    - Birth partner
    - Other children
    - Other?

2. Have you used other antenatal class providers in this or any previous pregnancies?

a. Yes (this pregnancy only)
b. Yes (previous pregnancy only)
c. Yes (all pregnancies)
d. No

If yes, which:

- ○ NHS,
- ○ NCT,
- ○ Other,

If no, please go to Question 3. If yes, please answer the following questions by stating if Blossom was not as good, the same or better than other antenatal services during this or previous pregnancies

	Blossom was….		
	Not as good	Same	Better
The teacher was non-judgemental			
The teacher was knowledgeable			
I was able to find a time that suited me and my family			
I was able to include my family/partner in the session			
I was able to get answers to my questions			
I came away knowing more than when I started			
Offers services other antenatal class providers doesn't			
Offers support in lots of different ways			
I get support from other parents			
I am able to choose from a range of courses that suit me covering a variety of topics			
I feel part of a community			

3. Tell us a bit about how things are going

Please rate on the following statements from strongly disagree to strongly agree

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel I have the information to take care of my baby					
I feel I know where to get support to take care of my baby					
I feel I have the information I need to take care of myself.					

4. Think about the last 2 weeks. Tell us how often you have experienced the following feelings:

	Not at all	On a few days	More than half the days	A bit every day	All the time
Concerned or worried about my baby's health					
Concerned or worried about taking care of my baby					
Concerned or worried about bonding with my baby					
Feeling low					
Feeling lonely					
Feeling excited about my new baby					

Please indicate how often each of the statements below is descriptive of you

	Hardly ever	Some of the time	Often
How often do you feel that you lack companionship?			
How often do you feel left out?			
How often do you feel isolated from others?			

5. Feeding your baby

I am feeding my baby the way I planned

- Yes
- No
- Not sure

I am feeding my baby

- Exclusively breast milk
- A combination of breastmilk and formula (known as mixed feeding)
- Formula milk only

I felt confident deciding how to feed my baby

- Yes
- No
- Not sure

The Blossom class helped me make the best decision for me

- Yes
- No
- Not sure

6. Would you recommend Blossom to other expectant parents?

Y/N/not sure

If yes, what do you feel makes Blossom different and successful?

Please choose **the top five most** important things

1. The fact that it is online
2. Convenient times
3. Affordable
4. Good reputation
5. There is on-going support after my baby was born
6. Meeting other new parents
7. My partner, family and friends can join in 8.
Experienced teachers
9. Warm and friendly
10. Inclusive
11. Accessible
12. Practical advice and information

Something else - please tell us

Any other comments:

We'd like to talk with some new parents to find out more about their experience of Blossom classes.

Can we contact you to ask some more questions?

Y/N

If yes:

Contact details

Name

Email

Phone

Thank you for helping us. We'll be in touch again in a couple of months

Interview Schedule

Thanks for agreeing to talk with me - we really appreciate just how busy you must be! Hope this is a good time?

I'll just take about 15-30 minutes of your time - it depends how much you have to say! First I'll give a bit of information, and then I have some questions - but it will feel just like a conversation really.

About me and the evaluation: My name is xxxxx and Blossom Antenatal have asked me and my colleagues to look at the impact of their classes. I've worked with a few organisations, measuring their impact - so it's a bit like a piece of research.

Blossom are planning for the future. They want to find out who chooses Blossom classes, and why. And they also want to find out about the difference their classes make.

So, I know you've given me your name and contact details but what we write will be totally anonymous. In the report that we write, you won't be able to identify anyone who has sent in a survey or spoken with us. We may come back to you and ask whether we can use a quote, or write a case study - but that will only happen if you give us your permission.

I'm going to record the conversation, and I may share this with people on the evaluation team but no one else. We'll listen to the recording and write down what you say. I'll make notes so that we can pull out key points that you make. After that I'll destroy the recording.

Have you any questions?

OK, let's get started!

I know your name but not a lot else! Tell me a bit more about you, your family and baby.

Prompts:
Age
Status - partner?
Family support?
Working/mat leave? job/role?
When had baby

OK, Tell me a bit about you and Blossom - when did you start and which classes have you done?

Prompts:
Other activities - Insta, relaxation, mental health, WhatsApp group
Before and/or after birth

So….why Blossom?

Prompts

Did you do more than one Blossom class/session. If yes; what made you come back for more? If no, why not?

How did you feel about the sessions being delivered online? Was that a positive thing for you?

Did you use any other antenatal education provider? How did Blossom compare to that?

If available, would you have done a face to face course?

If applicable: Did you bring your partner? Would you have if the timings had been different?

Can you think of a particularly great class you attended? One where you came away really feeling you'd learned loads, or feeling energised. Tell me about that.

Follow on questions

- It sounds as though x was really important to you - is that right? Anything else?
- So what did you go away with? That can be things, advice, information or feelings….
- What did you go on and do after the class, as a result?
- What changed for you after the class?

Our surveys are telling us that Blossom gives people the information they need to take care of their baby - and themselves.

Tell me a bit more about that - what is it about the information and how it's given?

Thinking back, what were your main thoughts and feelings before you had your baby?

Prompts

Were you pretty chilled, or were there things that you were worried about?

A lot has been written about loneliness in pregnancy - particularly during the pandemic. How was that for you?

Follow on questions

- Did Blossom help with those feelings?
- Did you feel all set up for having a baby - the right info etc?
- Tell me a bit more about that was like?
- Why was that?

So how did Blossom classes help with that?

- What specifically was it that made the difference for you?

So how has it all gone?! X weeks after having your baby how are things?

Follow on questions

- That's quite a difference! How did Blossom help with that d'you think?
- That sounds difficult - has Blossom helped at all with that?
- What specifically made the difference?/has helped?

How are you feeding your baby?

Follow on questions
How are you feeding?
Was that what you had planned?
How do you feel about that?

How much did Blossom help you make decisions about feeding? And help you feel prepared for feeding?

Why was that - Tell me a bit more about that

- **So it sounds like you're a bit of a Blossom fan! What, for you, has been the key reason you've found it so great? What difference has it made to you?**

Follow on
Your partner
Your family
Your baby

- **So it sounds as if you haven't had a really good Blossom experience. Why is that d'you think?**

Nearly finished! In our surveys straight away after classes, 90% of people said they would access more Blossom, but in later surveys only x% did.

- Why d'you think that is?
- What would make people come back for more?

Last question! If you had to recommend Blossom classes to someone you knew, what would you say? - what would be the main things you'd want to get across? What's special?

Is there anything else you want to tell me -about why you chose Blossom and the difference it's made to you?

Thanks for talking with me - I've got loads of information to think about. That's been so valuable.
What happens next is that I'll listen to this recording and write down what you say - more like notes so we can pull out key points. I'm also talking with other people, and we'll analyse all the recordings together.

We're still analysing the survey data - and when we've done all that we'll write a report which will go on Blossom's website. You'll get an email when it's there.
Thank you again.