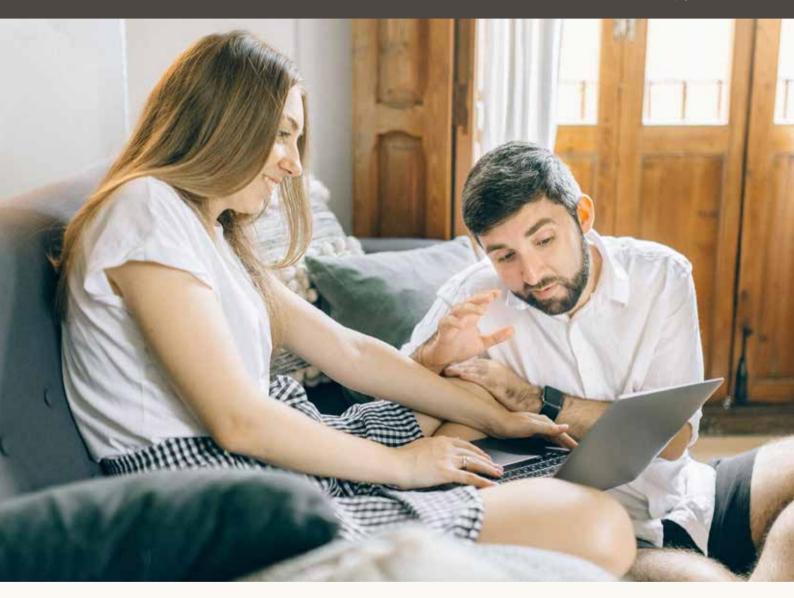


www.ijbpe.com



Educators' experience of facilitating antenatal education online

Mary Nolan, PhD, MA, BA (Hons), RGN Professor of Perinatal Education, University of Worcester, UK Editor, International Journal of Birth and Parent Education

Educators' experience of facilitating antenatal education online



Mary Nolan, PhD, MA, BA (Hons), RGN Professor of Perinatal Education, University of Worcester, UK Editor, International Journal of Birth and Parent Education

This study explored the experience of antenatal educators of facilitating online sessions during the Covid crisis. Twenty respondents were interviewed by the author in May and June 2020. Detailed notes taken during the interviews were analysed thematically. Three themes emerged: firstly, 'not knowing where they're at' which captured respondents' difficulty in understanding whether they were meeting parents' needs in the absence of feedback from body-language and limited questioning from parents; secondly, 'not being simply a TED talk' which reflected respondents' desire to avoid lecturing rather than facilitating, and thirdly, 'not as fulfilling' which summarised respondents' sense that delivering antenatal education online did not provide them with the multi-faceted experience of facilitating groups that they enjoyed in a face-to-face situation. The overarching theme was 'Not getting the full experience' which expressed respondents' concern that while online education had offered parents a chance to prepare for birth and early parenting during the Covid crisis when no groups were running, nonetheless, it was not able to provide the rich learning experiences and the intimate parent-to-parent, and parent-to-educator relationships that are characteristic of face-to-face groups. *Keywords: online antenatal education, coronavirus, relationships, facilitation*

INTRODUCTION

In April 2020, in response to the coronavirus crisis in the UK and increased usage of online technologies for education and health services, the Early Intervention Foundation (EIF) published a report on the evidence, challenges and risks relating to virtual and digital delivery of interventions for children and young people (Martin et al., 2020). The report concluded that:

There is little evidence to suggest that virtual and digital interventions are more effective than traditional face-to-face approaches (Summary).

The EIF also stressed the importance of 'personalisation', that is, of the need to develop a relationship between the practitioner/educator and the learner. Practitioners were advised to identify the core components of their intervention and ensure that these were maintained in transitioning from a face-to-face to a virtual environment. Finally, the EIF stressed that measuring impact immediately after the delivery of the online intervention is insufficient, and that long-term impact on the behaviour of recipients of the intervention needs also to be assessed.

During the coronavirus crisis, thousands of women have been deprived of the rituals and routines of pregnancy in normal times – telling grandparents-to-be the exciting news face-to-face; attending clinic appointments and ultrasound scans with their partners; having a specially chosen companion throughout labour, and building a support network with their peers during groupbased antenatal education. The urgent desire on the part of pregnant women and couples to learn what to expect in labour, birth and early parenting, and to form social networks for support during the first months of new parenthood became, if anything, more intense as people were confined to their homes and forbidden to associate with friends and family in person. To meet the ongoing demand for antenatal education, many antenatal educators and birth organisations moved their provision online.

Antenatal education aims to increase parents' self-efficacy for labour, birth and early parenting and to achieve these goals through social, affective and cognitive processes. Content pivots between information sharing about the anatomy and physiology of labour, birth and the puerperium, and the embodiment of physiology through practising skills for managing the intensity of contractions, carrying out babycare, and for supporting mental health (Nolan, 2020). The context for learning is a group one which enables a small number of parents to share their hopes, fears, values and ideas about the transition to parenthood, thereby building networks of peer support for the postnatal period.

Anderson et al. (2001) discussed the role of the teacher in online education, coining the phrase 'teaching presence' to encapsulate the multiple responsibilities that the teacher must undertake, including 'the design, facilitation and direction of cognitive and social processes for the purpose of realizing (students') personally meaningful and educationally worthwhile outcomes' (online). Swan (2008) emphasised that online learning is most likely to yield teachers' desired learning outcomes when students participate in 'collaborative dialogues' with their peers, which expand and personalise their understanding of the topics covered during the sessions.

When the Covid-19 crisis hit the UK in March, 2020, the opportunity for expectant parents to meet each other in face-to-face groups disappeared overnight, resulting in educators turning to online education to try to meet their clients' need to prepare for labour, birth and early parenting. This study aimed to survey educators' experiences of delivering online antenatal education, offering them an opportunity to reflect on an intervention that was adopted wholesale with very little preparation and which, to date, remains largely unevaluated.

METHOD

(a) Interview schedule

A telephone interview schedule (Appendix A) was developed by the researcher in consultation with two experienced childbirth and parenting educators and trialled with a third experienced educator which resulted in the number of questions being reduced from ten to six in order to encourage more in-depth reflection on key areas of interest. Questions which elicited similar responses were amalgamated and the wording of some was changed to ensure that it would be equally applicable to interviews with respondents who were delivering antenatal education online and those delivering breastfeeding preparation.

(b) Recruitment

Antenatal educators were recruited in early May, 2020, via the FaceBook page of the International Journal of Birth and Parent Education, a Journal, edited by the researcher, for professional and lay practitioners working with families across the transition to parenthood. A post requesting educators to participate in a 30 minute interview about their experiences of leading online antenatal sessions was met with a speedy response. Within 48 hours, 23 women had volunteered for the study. The final number was 20 owing to difficulties in finding an appropriate time for interview for three of the educators.

(c) Respondents

The characteristics of the respondents are summarised in Table 1. Fourteen were delivering online antenatal education in preparation for labour, birth and early parenting, and six were providing breastfeeding education to expectant parents. Respondents had been in practice for between 3 and 43 years, meaning that all were highly experienced. Thirteen of the educators had trained exclusively with the NCT, the UK's largest parent charity; seven had trained with the NCT and had also received training in parent education in the course of practising as a health visitor (one participant) a midwife (one participant), a hypnobirthing teacher (one participant), and a perinatal educator (one participant). Two respondents were qualified as International Board Certified Lactation Consultants (IBCLC), one of these also having trained in the Solihull Approach; one respondent who was a

midwife and Infant Feeding Consultant said she had received no specific training in parent education, and one respondents said she had received no training but had worked with the Breastfeeding Network.

In total, the respondents had delivered 179 online antenatal sessions. Some sessions were one-off and some constituted courses of antenatal education delivered by the same educator. The length of individual sessions was between 1 hour and 3.5 hours.

(d) Consent

On agreeing to being interviewed, each respondent was sent a Participant Information Leaflet with details of the study, and also a consent form which they were asked to sign, date and return to the researcher prior to the interview.

(e) Interviews

Interviews were carried out in May and June, 2020. Each respondent was offered a choice of dates and times to be interviewed. The majority of interviews lasted around half an hour, with four lasting up to 50 minutes. Interviews were not recorded, as had been promised to respondents in the interests of enabling a more relaxed conversation, but the researcher made extensive notes throughout, capturing much of the interviews verbatim.

(f) Ethical Approval

The study was approved by the University of Worcester Research Ethics Committee for Health and Social Sciences.

ANALYSIS

The data was analysed thematically in accordance with Braun and Clarke (2015; 2013; 2012) who consider that thematic analysis is appropriate for focusing on the explicit content of the data. The detailed notes taken during each interview were read several times to ensure familiarisation with the data. Keywords and phrases were subsequently identified, and themes provisionally generated before returning to the data for further reading. The themes were then reviewed and labelled. Finally, an overarching theme was derived that captured the essence of the interviews overall.

Braun and Clarke (2015) emphasise the need for reflection when undertaking thematic analysis. The researcher was very aware of the difficulties she faced in approaching the interview data. As a childbirth and parenting educator of 28 years, but who had not practised with parent groups for six years, she recognised the potential for bias against methods of delivering antenatal education which she had not experienced herself. The analysis was therefore undertaken over a period of time to enable her to see the data afresh and challenge herself repeatedly at each stage of the analytical process.

FINDINGS

Three themes and one sub-theme are presented, each captured in the words

of one of the respondents. Finally, the overarching theme is presented.

THEMES

(a) 'Not knowing where they're at' Many of the respondents described how, prior to starting to deliver antenatal education online, they had worried about how they would connect with parents. This anticipatory concern turned out to be well-founded and educators commented on how difficult it was to get a sense of the parents' presence online:

It's hard to create relationships via a screen.

Respondents were troubled by not being able to make eve-contact with individuals and not being able to read parents' body language in order to determine whether they were engaged:

It's challenging not having immediate feedback from parents' faces and reactions on what we're doing.

One respondent said she hoped she was 'grabbing them' but felt she didn't know 'where they're at'. Another said:

I don't have a sense of the parents as people; they feel more neutral to me, each in their little box.

Another was both challenged and intrigued by the difficulty in knowing whether couples were laughing together with the group or were laughing independently of the group in response to a private joke. Just as the respondents found it hard to

connect with the parents, they were equally aware that the parents weren't able to read signals of empathy that they (the educators) were sending out. Several respondents described how they regretted the lack of 'warmth and chit-chat' in the online sessions and that parents couldn't 'see' the 'warmth and reassurance' they were trying to convey in the same way as they would perceive this face-to-face.

One respondent reflected anxiously on the longterm impact of this perceived lack of connection with the parents she was working with:

The antenatal course opens the door to postnatal support so that's the risk: if you don't make the connections antenatally, parents won't come back to you for support later.

(b) Not being 'simply a TED talk'

When describing the challenges of delivering online antenatal education, one respondent said she worried about 'being the person who is doing the most talking' and another said she wondered whether she was offering 'simply a TED talk'. The difficulties in being a facilitator rather than a teacher were, the respondents felt, owing to a number of factors.

Many commented that there were far fewer questions coming from parents than they were accustomed to during face-to-face sessions. Even when parents had the chance to discuss topics with each other in break-out rooms, they did not return to the whole group with questions generated by their private discussions. Questions that did arise were directed at the educator rather than at the group of

TABLE 1	
No. of respondents	20 (all women)
No. of respondents providing antenatal education	14
No of respondents providing exclusively breastfeeding preparation	6
Number of years providing antenatal education/breastfeeding preparation	3 – 43 years (mean = 18 years; mode = 10 years)
How trained in antenatal education/ breastfeeding preparation	13 exclusively with NCT 1 with NCT and also had trained as a Health Visitor Infant Feed- ing Specialist 1 with NCT and had received training in hypnobirthing 1 had trained as an IBCLC, and with the Solihull Approach 1 with NCT and as an antenatal and postnatal exercise educa- tor with Janet Balaskas 1 had received no specific training but had worked as a midwife and Infant Feeding Consultant 1 as an IBCLC 1 had received no professional training but had worked with the Breastfeeding Network
Number of online sessions provided ('one-off' sessions as opposed to courses involving more than one session with the same group of parents	179 (mean = 16 sessions; mode = 20)

parents so that questioning became a one-to-one interaction between a parent and the educator rather than an opportunity for the whole group to explore ideas. The combination of lack of questioning and it being difficult to read parents' body language meant that respondents found it hard to know how to shape their session to meet parents' needs. Respondents were especially anxious about parents who appeared to be shy; one said she worried that 'the quiet people aren't getting a look-in'.

In the absence of interaction, one respondent commented that online sessions felt:

Less like working with a group and more as if the session is information-led.

One felt that there was a 'lack of spontaneity' in the online sessions and that this was reflected in the absence of 'discussion of feelings'. 'Telling people rather than listening to them' cut across the grain for many respondents who had been trained to create an educational environment where parents were supported to contextualise information and ideas within their own belief systems and personal circumstances. While parents may have been doing this, respondents were keenly aware that the online sessions didn't provide an opportunity for co-creation of meaning around giving birth and taking responsibility for a new baby.

While the majority of respondents were concerned about being 'teacherly' and were worried that parents were not getting the opportunities they needed to explore the transition to parenthood with their peers, two respondents sounded a discordant note. One commented:

Some parents like powerpoint; they like being taught.

Another said that she thought it an advantage of the online sessions that 'there's no pressure to participate'. However, this same respondent recognised that lack of such 'pressure' could lead to disengagement. She commented wryly that she 'once observed a dad watching TV during the session!'

A sub-heading of the 'Not being simply a TED talk' theme was 'not being able to offer a tactile experience'. When respondents were asked to reflect on whether there were aspects of their faceto-face sessions that became compromised online, most referred to practising physical skills for labour. In their face-to-face sessions, they made labour and birth 'real' for parents through embodied learning - practising different positions, breathing patterns, massage strokes and positive thinking techniques for helping with the intensity of contractions. Several respondents noted that they were used to encouraging parents to handle and explore a model pelvis in order to highlight the need for the woman to work with her pelvis to facilitate the passage of the baby. Respondents were concerned that, online, parents could not have this experience:

I don't do physical skills – just talk about them.

Those who did demonstrate active birth positions and massage strokes (sometimes coercing teenage family members into being models) and who encouraged parents to practise during the sessions recognised the limitations of the online environment:

It's hard to give feedback to parents when they're practising at home and you're only seeing them on the screen.

Sometimes it wasn't even possible to see what parents were doing if they chose to turn off their cameras.

Another respondent talked of how, even under normal circumstances, it can be difficult to encourage parents to participate in body work, but that:

Face-to-face, it's easier to encourage people to have a go. Online, people can just opt out.

There were, however, discordant voices amongst the respondents especially with regard to facilitating relaxation, with several commenting that they enjoyed doing this online because they felt it was far easier for parents to relax in the comfort of their own homes than in a group session held in a 'classroom' environment. One respondent in particular had a very different attitude towards online teaching of physical skills from those of the majority:

I love doing physical skills online. I like it that parents are practising in the room where they will be in early labour.

This respondent notified parents beforehand to have bean-bags, pillows and birth balls available so that they could use these while practising during her sessions. She demonstrated massage strokes on herself and on a pillow and said that she experienced no difficulties in getting parents to join in.

Hers was, nonetheless, an unusual account; far more respondents returned again and again to their concern about the limitations of online education in terms of providing 'a tactile experience' and opportunities for embodied learning which they felt were such a vital part of preparation for birth and parenting.

c) 'Not as fulfilling'

When asked whether they felt that their online sessions were successful in increasing parents' knowledge about labour, birth and early parenting, and boosting their confidence for the journey into parenthood, respondents were ambivalent. Some felt that online sessions were equally good at transmitting knowledge, if not better than face-to-face. However, linking in with the theme of 'Not knowing where they're at', one respondent commented:

It's difficult to know whether I am giving too much information and they're feeling overwhelmed or too little and they're feeling bored.

One of the respondents summarised the

feelings of many others when she said: I don't have any evidence as to whether information is retained in the same way [as in face-to-face sessions]. The parents don't come back from their break-out groups with lots of questions.

The lack of questioning deprived respondents of an important means of understanding whether information had been received and whether parents were thinking it through and applying it to their own situations. The difficulty in assessing how effective their sessions were was a source of anxiety to many and impacted their satisfaction with online antenatal education.

Respondents were also concerned about the extent to which sessions enabled parents to form friendships which would be a source of support after their babies were born. One commented:

I think parents miss the opportunity to make friends. This is a real sadness for me.

However, many of the respondents had set up Whatsapp or FaceBook groups alongside their online sessions and had found these to be highly effective both in terms of providing an opportunity for parents to ask questions, and in terms of helping them make friends:

Parents do ask questions via Whatsapp.

Social media offers an immediacy of communication that is great.

In fact, one respondent felt that the combination of the online sessions and the Whatsapp group was more powerful in connecting parents with each other than face-to-face sessions:

Connections are much deeper. People are more open, seeing each other in their own homes – less competitive, less judgemental.

Hers was, however, an isolated voice. While respondents found merely transmitting information in the absence of interactions that built up parents' social network unsatisfying, nearly all highlighted some positive aspects of online provision that gave them satisfaction:

Online provides a caring open space for some people who wouldn't access antenatal education otherwise.

There can be an intensity in sitting in a face-to-face group that's absent when people are at home and feel more in control.

When asked whether they would continue to lead online sessions after the Covid restrictions were lifted, respondents' answers reflected their mixed views of the quality of the education they were able to provide online, and their varying satisfaction with working with parents in this way. For many, satisfaction with online provision was compromised by the demands of running groups via Zoom and the lack of response from parents:

I find Zoom exhausting. The sessions

are not as fulfilling for me. There's a lot of give in these sessions and you get a lot less back.

One respondent reflected that delivering online education 'has been a remarkable experience' but nonetheless felt that:

Zoom needs to be an alternative, not a default position for antenatal education.

And another reflected that:

The online courses are a compromise with some advantages we hadn't anticipated [but they] will never be a replacement for face-to-face.

Several respondents suggested a mixed approach as the way forward:

Perhaps a way forward would be meeting face-to-face for some sessions and then doing some online sessions.

OVERARCHING THEME: 'NOT GETTING THE FULL EXPERIENCE'

One respondent summarised the overall feeling of the interviews when she said that she felt parents were not getting 'the full experience' of antenatal education. This comment captured general concerns about the loss of interaction between educator and parents and between the parents themselves during online sessions, the loss of the 'tactile experience' of handling teaching aids and especially of opportunities for parents to practise skills for labour and early parenting, and decreased levels of 'energy and engagement' which came from not being physically close to participants or being able to make eye contact with them.

Respondents also felt that they too weren't 'getting the full experience' because, as one remarked, referring to difficulties in getting to know the parents as individuals and understanding their concerns and needs: *You don't get the full picture.*

Not 'getting the full experience' led to a lack of satisfaction on the part of respondents, even though several commented on how proud and pleased they were to be able to provide some form of preparation for birth and early parenting at a time when parents were isolated from each other, frightened, and desperately seeking information.

DISCUSSION

This was a small study of a group of educators, the majority of whom had been trained in the voluntary rather than the statutory sector. They were therefore reflecting on their experiences of delivering antenatal education online within the context of the NCT's particular approach to preparation for birth and parenting.

Nonetheless, the study is useful because it can start a discussion about the merits of online antenatal education and whether they are sufficient to outweigh the compromises that come with it. It is important to have this discussion before the convenience of online sessions starts to drive a move towards removing face-to-face sessions as a choice for parents (and educators).

As Laurillard (2009) comments, whether online or in the classroom, 'what it takes to learn does not change significantly'. Studies and reports (e.g. The Scottish Government, 2012; Kane et al., 2007; Hanna et al., 2002) have shown that parents' agenda for antenatal education is primarily twofold: to gain information that will boost their confidence to make the journey into parenthood, and to develop a friendship network to support them. Several respondents felt very positively about the capacity to deliver up-to-date information via powerpoint presentations. The effectiveness of online as a means of transmitting health-related information has been highlighted in studies such as that by Win et al. (2016) which found that patients with chronic conditions often preferred online education rather than face-to-face contact with overworked professionals who tried to transmit a large body of information in a short period of time. Yet at the heart of antenatal education is discursive learning, with parents having their beliefs and values challenged by others, leading to a redefinition of who they are and of the kind of mothers and fathers they wish to be. The Scottish Government's report (2012a) highlighted that parents see online education as an adjunct to, rather than replacing a relationship with a practitioner and other parents. An 'iterative dialogue' (Laurillard, 2009:11) between the educator and the group, and between group members, is essential for maximising the impact of information on the choices that parents make.

Labour is an intensely physical experience and preparation for birth logically demands the opportunity for embodied learning, to help parents begin to understand how they can work with their bodies to facilitate the passage of their baby into the world. Building confidence for the first days and weeks of caring for a new baby is greatly assisted by enabling parents – and especially fathers and partners – to learn practical babycare skills during the antenatal period. In this study, the majority of respondents felt either that it was impossible to facilitate practical skills work online, or that any means of doing such work was inadequate in important respects, and that parents were therefore missing out.

Given that the majority of respondents described online antenatal sessions as neither discursive nor experiential, it is important to question whether Laurillard's criterion for online education, namely that it should be 'a genuinely enhanced learning experience' can be met. This is not to downplay the significant advantage perceived by many respondents of the 'democratic' nature of online antenatal education, enabling parents who might perceive themselves as socio-culturally disconnected from antenatal education delivered in groups, to come together in a space where their backgrounds and personal circumstances are less obvious. Many of the respondents referred to what has been coined 'zoom fatigue' (Sklar, 2020) arising from the struggle to deliver education in the absence of non-verbal cues from students, a focus on words, and split attention generated by students presenting themselves as a screenful of faces. Respondents also struggled with creating 'presence' online (McAllister, 2020) because the relationship between educator and students is customarily built by interactions that happen outside the synchronous delivery of teaching online – chats in between classes, coffee talk, hallway conversations and discussions before and after the teaching session itself.

One means of overcoming this lack of 'presence' may be via Whatsapp groups. These were instigated by many respondents as an adjunct to their online sessions, and were felt to be effective in providing the affective support that was difficult to give online. This finding is in keeping with the work of authors such as Timmis (2012) who found that instant messaging 'offers a means of sustainable peer support for students' (p3). During the Covid crisis, parents experienced a social disconnect as they were confined to their homes away from friends, family and health professionals and Whatsapp groups brought them together in a social messaging space that many were familiar with in their everyday lives. Such groups also provided the opportunity for them to ask questions that they either did not think of during the online sessions, or were inhibited from asking. Pimmer (2019) considers that instant messaging spaces 'serve as a relevant resource for knowledge sharing and application' (p58).

IMPLICATIONS FOR PRACTICE

This is a preliminary study of an educational intervention that was rolled out almost overnight to meet the needs of parents in an unprecedented time of social isolation. It is therefore to be treated with caution in terms of shaping practice. One considerable benefit of the study - a benefit identified several times by respondents - was the opportunity it provided for them to reflect on their practice and on its possible impact on parents. As the Covid pandemic abates, there will be time for more reflection in a context where there will once again be a choice for parents in how they access antenatal education - whether face-to-face or online. It is important now for educators to clarify their aims and learning outcomes and to address, with honesty, each of these in relation to online provision and ensure that 'the core components of [the] intervention [are] maintained in any adaptation' (EIF, 2020:5).

FUTURE RESEARCH

Very few of the respondents referred to evaluation of their online antenatal education sessions. Several remarked that it was difficult to get feedback from parents perhaps because of the impersonality of online provision. Feedback that was obtained tended to be overwhelmingly positive which respondents felt was probably owing to parents' gratitude and relief that they could get some preparation for birth and early parenting at a time when faceto-face antenatal education was not available.

This study now needs to be followed up with research into parents' experience of online antenatal education. It is likely that online provision will continue and evolve and studies of blended antenatal education, as outlined by various respondents, where some sessions are offered online and others face-to-face, will enable a better understanding of how to capitalise on the accessibility and convenience of online while maintaining the discursive and affective elements of face-to-face that many respondents considered to have been compromised. Attention also needs to be devoted to whether and how embodied learning can be achieved online.

Finally, the present study suggests that the Whatsapp groups set up by educators alongside their online sessions were successful in alleviating pregnant parents' feeling of being alone with their fears and problems. It may be that these groups are the most important aspect of the online antenatal education package. The Whatsapp groups in this study included the educator herself, thus making her available to answer parents' questions and signpost them to further sources of support. Studies investigating the advantages and disadvantages of Whatsapp groups for parents only, compared with those that include the educator, would be worthwhile as would studies of Whatsapp groups that include the educator for a certain number of weeks after which she leaves the group and it is available solely to the parents.

Overall, it is important for research to determine whether the accessibility of online antenatal education is matched by its capacity to provide effective preparation for the transition to parenthood, or whether the compromises that it involves risk short-changing parents at a critical juncture of their lives.

REFERENCES

Anderson, T., Rourke, L., Garrison, G.D., Archer, W. (2001) Assessing teaching presence in a computer conferencing context. Athabasca University Library and Scholarly Resources. Available at: https://auspace.athabascau.ca/bitstream/ handle/2149/725/assessing_teaching_presence. pdf?sequence=1&isAllowed=y <accessed 05/07/2020>

Braun, V., Clarke, V. (2012) Thematic analysis. In: H. Cooper, P.M. Camic, D.L. Long, A. T. Panter, D. Rindskopf, & K.J. Sher (Eds.) APA Handbook of Research Methods in Psychology, Vol. 2. Research Designs: Quantitative, qualitative, neuropsychological, and biological. American Psychological Association: 57–71.

Clarke, V., Braun, V. (2013) Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. Psychologist, 26(2):120-123.

Clarke, V., Braun, V., Hayfield, N. (2015) Thematic analysis. Ch. 10 in: J.A.Smith (Ed.) Qualitative Psychology: A practical guide to research methods. Los Angeles, Sage:222-248.

Hanna, B.A., Edgecombe, G., Jackson, C.A. Newman, S. (2002) The importance of first-time parent groups for new parents. Nursing and Health Science, 4:209-214.

Kane, G.A., Wood, V.A., Barlow, J. (2007) Parenting programmes: A systematic review and synthesis of qualitative research. Child Care, Health, and Development, 33(6):784-793.

Laurillard, D. (2009) The pedagogical challenges to collaborative technologies. Computer-Supported Collaborative Learning, 4:5-20.

Martin, J., McBride, T., Masterman, T., Pote, I., Mokhtar, N. et al. (2020) Covid-19 and early intervention: Evidence, challenges and risks relating to virtual and digital delivery. London: Early Intervention Foundation.

Nolan, M.L. (2020) Parent Education for the Critical 1000 Days. London: Routledge. (Chapter 2, pp6-20).

Pimmer, C., Abiodun, R., Daniels, F., Chipps, J. (2019) "I felt a sense of belonging somewhere". Supporting graduates' job transitions from Whatsapp groups. Nurse Education Today, 81:57-63.

Sklar, J. (2020) 'Zoom fatigue' is taxing the brain. Here's why that happens. National Geographic. Available at: https://www.nationalgeographic.co.uk/science-andtechnology/2020/04/zoom-fatigue-is-taxing-the-brainheres-why-that-happens <accessed 11/07/2020>

Swan, K.P., Richardson, J.C., Ice, P., Garrison, D.R. Cleveland-Innes, M. et al. (2008) Validating a measurement tool of presence in online communities of inquiry. e-mentor, 2(24). Available at: https://www.researchgate. net/profile/D_Garrison/publication/265406073_ Validating_a_Measurement_Tool_of_Presence_in_Online_ Communities_of_Inquiry/links/5429d3650cf277d58e86ff71/ Validating-a-Measurement-Tool-of-Presence-in-Online-Communities-of-Inquiry.pdf <accessed 6 September, 2020>

The Scottish Government (2012) Bringing up children: Your views. Edinburgh: The Scottish Government.

The Scottish Government (2012a) National Parenting Strategy: Making a positive difference to children and young people through parenting. Edinburgh: The Scottish Government.

Timmis, S. (2012) Constant companions: Instant messaging conversations as sustainable supportive study structures amongst undergraduate peers. Computers & Education, 59(1):3-18.

Win, K.T., Hassan, N.M., Oinas-Kukkonen, H., Probst, Y. (2016) Online patient education for chronic disease management: Consumer perspectives. Journal of Medical Systems, 40:88. Doi: 10.1007/s10916-016-0438-0

APPENDIX A

INTERVIEW SCHEDULE

General questions

- a) For how many years have you been facilitating group antenatal education courses?
- b) How did you train as an antenatal educator?
- c) How many online courses have you facilitated?
- 1. What were you most worried about before you started facilitating online antenatal sessions?
- 2. What have proved to be the greatest challenges in leading the online sessions?
- 3. How effective do you feel that online antenatal education is in terms of:
 - Friendship formation among group members?
 - Enabling parents to share their feelings and ideas?
 - Increasing knowledge and skills for labour, birth, breastfeeding and early parenting?
- 4. What do you like about the online sessions?
- 5. What do you dislike about the online sessions?
- 6. Will you continue to lead online sessions after the Covid-19 pandemic is over?