

**Supporting multiple birth families;
establishing an evidence base to inform
health visitor practice.**

**A report from the Elizabeth Bryan Multiple Births
Centre and the Institute for Health Visiting
March 2020**



Supporting multiple birth families; establishing an evidence base to inform health visitor practice

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Acknowledgements:

We wish to thank the Burdett Trust for Nursing for the funding in support of this study.

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March 2020

Citation: Elizabeth Bryan Multiple Births Centre (EBMBC) and The Institute of Health Visiting (iHV) (2020) *Supporting multiple birth families; establishing an evidence base to inform health visitor practice*. [pdf] Available at: www.bcu.ac.uk/support-mbf

Supporting multiple birth families¹; establishing an evidence base to inform health visitor practice.

¹Throughout this document 'multiple birth families' is used to refer to families with twins, triplets and higher order multiples

Executive Summary

Multiple births: twins, triplets or more, bring an increased risk of complications for the mother and her babies which can affect family life and wellbeing. Recent studies have confirmed that adapting to parenthood and caring for two or more children of the same age presents parents with physical, emotional, practical and economic challenges (Leonard and Denton, 2006; Heinonen, 2015; El-Toukhy et al, 2018). The first year can be particularly difficult, especially since many multiples are born pre-term (Harvey et al, 2014). In the United Kingdom, health visitors (HVs), with their family support role, are uniquely placed to promote multiple birth family wellbeing and to arrange for ongoing support (Hamill, 2014; Harvey et al, 2014). This support is becoming increasingly imperative with the rise in the rates of multiple births in the UK over the last 40 years (Office for National Statistics, 2019).

Four recent studies have called for research to facilitate the provision of evidence based care by health visitors for multiple birth families (Harvey et al, 2014; Wenzel et al, 2015; Alamad et al, 2018; Scoats et al, 2018). This study is the first to provide it, generating evidence not only of the current practice and perceptions of health visitors working in the UK with multiple birth families but also exploring the extent of education and professional development received by UK health visitors on the special needs of these families.

The study was a collaboration between the Elizabeth Bryan Multiple Births Centre and the Institute for Health Visiting (iHV). It is hoped that the findings of this study will inform health visitor practice to improve the provision of care and support to multiple birth families.

A cross-sectional, online survey of health visitors in the UK was undertaken using a questionnaire via 'Online Surveys'. This enabled the study team to access a large number of HVs practising in diverse settings and working with a broad range of families and communities.

The questionnaire consisted mostly of closed questions and Likert scales. Some open questions were also included to capture the experiences of participants. The survey generated quantitative and qualitative data. The quantitative data was analysed using

descriptive statistics and appropriate statistical tests were used to explore potential correlations. Qualitative data arising from participant responses to the open questions were analysed using thematic analysis.

The great majority of health visitors (88%) have twins on their current caseload. However, nearly two out of three (63%) have not received any specific training to improve their knowledge and skills when working with families with multiples during their initial HV training. Instead, discussion with colleagues (73%) and professional experience (79%) are the most commonly stated sources of information on which they rely.

The biggest challenge for health visitors (55%) was appointments taking double the time. Almost all respondents undertook additional work such as playing with siblings or changing nappies while undertaking home visits of multiple birth families.

The main areas both HVs (50%) and parents (60%) wanted more information about were the daily tasks of caring for multiple birth children such as breast-feeding, weaning and managing crying.

The identification of the current gaps in education and professional development about multiples should prompt service, education and continuing professional development providers to address this shortfall. This study also highlights the challenges and pressures that health visitors currently face and the lack of recognition in their current workload configuration of the needs of multiple birth families. Strategies to give health visitors more support for helping multiple birth families should be explored, enabling them and the service more generally to give them more effective help.

Given the recently documented decrease in the number of Children's Centres (Smith et al, 2018), ensuring that health visitors meet the needs of the families they support is becoming ever more urgent.

References

- Alamad, L. Denton, J. Harvey, M. (2018) Health Visitors' experiences supporting multiple birth families: An exploratory study *Journal of Health Visiting* 6 12 610-620
- El-Toukhy, T. Bhattacharya, S. Akande, V.A. on behalf of the Royal College of Obstetricians and Gynaecologists (2018) Multiple pregnancies following assisted conception. Scientific Impact Paper no. 22 *British Journal of Obstetrics and Gynaecology* DOI:10.1111/1471-0528.14974
- Hamill, C. (2014) Specialist support for parents of twins *Journal of Health Visiting* 2(11): 586-588
- Harvey, M.E. Athi, R. Denny, E. (2014) Exploratory study on meeting the health and social care needs of mothers with twins *Community Practitioner* 87(2): 28-31
- Heinonen, K. (2015) Methodological and hermeneutic reduction – a study of Finnish multiple-birth families *Nurse Researcher* 22(6): 28-34
- Leonard, I. Denton, J. (2006) Preparation for parenting multiple children *Early Human Development* 82(): 371-378
- Office for National Statistics (2019) *Birth Characteristics in England and Wales: 2017* <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/datasets/birthcharacteristicsinenglandandwales/2017>
- Scoats, R. Denton, J. Harvey M. (2018) One too many? Families with multiple births *Community Practitioner* 91, 10 20-31
- Smith, G. Sylva, K. Smith, T. Sammons, P. Omonigho, A. (2018) *Stop Start: Survival, Decline or Closure? Children's centres in England 2018* London: The Sutton Trust
- Wenze, S.J. Battle, C.L. Tezanos, K.M. (2015) Raising multiples: mental health of mothers and fathers in early parenthood *Archives of Women's Mental Health* 18(2): 163-176

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1.0 Background

Multiple births present an increased risk of complications for the mother and her babies, which can affect family life and wellbeing. Multiple birth pregnancies can result in maternal complications such as hypertension, gestational diabetes, anxiety and depression (Redshaw et al, 2011; Dodd et al, 2015; El-Toukhy et al, 2018) which may extend into the postnatal period (Ooki and Hiko, 2012). Anxiety and depression experienced by multiple birth parents can be detrimental to parenting behaviours and child development (Bryan, 2003; Domato, 2005). Mothers of multiples often feel isolated and there is a higher divorce rate in multiple birth families (Bryan, 2003; Jena et al, 2011).

Many multiples are born preterm (before 37 completed weeks) (NICE, 2019). Consequently, parents are often unable to attend antenatal classes (Redshaw et al, 2011) so they may be less prepared for parenthood. Prematurity can have an adverse impact on adaptation to family life, particularly if one baby is discharged home before the other(s). Breast feeding rates for multiples are lower than for singletons (Ostlund, 2010; Whitford et al, 2017). The incidence of cerebral palsy is higher for multiples than for singletons. There is also a higher incidence of developmental delay and autistic spectrum disorder compared to singletons (Shinwell et al, 2009). The impact of these difficulties on family life is apparent irrespective of them being present in only one of the children (Bryan, 2003).

Multiple birth children are often seen as 'one unit' by both the family and society more widely. The resulting lack of individuality and identify can inhibit early child development with potential longer-term consequences affecting their relationship with each other and their own emotional wellbeing (Bryan, 2003). The needs of other children in the family can also be neglected. Siblings may display regressive and attention-seeking behaviours (Bryan, 2003; Harvey et al, 2014; Scoats et al, 2018). In addition, there is a higher incidence of child abuse in multiple birth families (Bryan, 2003). Bereavement can also have an impact on family-wellbeing. Multiple pregnancies account for higher numbers of perinatal deaths compared to singletons (Office for National Statistics, 2019; Montacute and Bunn, 2016). This means parents may be grieving for one baby whilst caring for the survivor(s) (Expert Group on Multiple Births after IVF, 2006).

Adapting to parenthood and caring for two (or more) children of the same age presents parents with physical, emotional, practical and economic challenges (Leonard and Denton, 2006; Heinonen, 2015a; El-Toukhy et al, 2018) and the first year can be particularly difficult (Harvey et al, 2014). The current mismatch between support needed and received can have a negative impact on family wellbeing (Harvey et al, 2014; Heinonen, 2015b) with a longer-term risk of disrupting family integrity (Wenze et al, 2015). Addressing the challenges that multiple birth families face should be of concern to society (Ooki and Hiko, 2012). Policy makers and those responsible for service provision need to ensure appropriate support for families is available (Donetto and Maben, 2014).

In the United Kingdom (UK), health visitors (HVs) are uniquely positioned to promote multiple birth family wellbeing and to facilitate referral for ongoing support (Hamill, 2014; Harvey et al, 2014). Health visitors are registered nurses / midwives with post-graduate community health education. They are public health practitioners who work with families with children under five years of age offering direct support, advice and guidance on all aspects of health promotion through the Healthy Child Programme. A key aspect of the HV role is risk assessment and risk management. Given the decrease in the number of Children's Centres (Smith et al, 2018), the HV role is increasingly essential. Within their family support role, HVs are uniquely positioned to work with multiple birth families. This support is becoming increasingly imperative with the rise in the rates of multiple births in the UK over the last 40 years (Office for National Statistics, 2019).

Multiple birth parents want information and emotional support on all aspects of childcare including guidance on feeding, sleeping and coping with behavioural problems from knowledgeable HVs (Hamill, 2014; Harvey et al, 2014; Jenkins and Coker, 2010). Whilst most parents need advice and support on the transition to parenthood and caring for their infants, this is particularly the case for parents of multiples. The exact nature of this care and support should be tailored to meet individual needs to ensure it is effective (Redshaw et al, 2011; Donetto and Maben, 2014; Heinonen, 2016). Evidence based support from HVs during the early years therefore has the potential to promote family wellbeing. The provision of individualised care and support is essential and HVs should be proactive, collaborative and empowering (Jena et al, 2011; Nurse and Kenner, 2011; Ooki and Hiko, 2012). However, the

support provided by HVs is variable and often does not meet the needs of multiple birth families (Harvey et al, 2014; Scoats et al, 2018). Few health visiting teams in the UK have a 'multiple births champion' or 'multiple births care pathway' (Hamill, 2014). In a national survey, mothers of multiples were less likely to receive advice from healthcare professionals (including HVs) on infant care compared to mothers of singletons (Redshaw et al, 2011). Furthermore, there is a lack of guidance or standards for healthcare professionals generally and HVs in particular on the longer-term care and support needs of multiple birth families. The extent to which the needs of these families are currently addressed in HV curricula and professional development is unknown.

There has been limited research involving healthcare professionals generally (Heinonen, 2016) and HVs specifically to explore their experiences supporting multiple birth families. In order to develop evidence based multiple birth services it is important to understand the HV perspective and the challenges they face. Workload pressures can sometimes negatively impact on their role (Donetto and Maben, 2014; Alamad et al, 2018) and it is likely that supporting multiple birth families adds to their workload, especially given the challenges that families face. For example; multiple birth families may be unable to attend clinic appointments either because of lack of accessibility or the practicalities of leaving the home with two or more infants. Whilst seeing these families in the home-setting provides the HV with insight to their everyday life (Heinonen, 2016), undertaking home visits inevitably adds to their workload (Alamad et al, 2018).

The need for research to facilitate the provision of evidence based care by HVs for multiple birth families has been identified (Harvey et al, 2014; Wenze et al, 2015; Alamad et al, 2018; Scoats et al, 2018). More broadly, contemporary evidence is required to support the development of policy, HV education and service provision to provide effective, individualised care and support for multiple birth families (Harvey et al, 2014; Alamad, 2018). The reported study consequently explored the current practice of HVs working in the UK with multiple birth families.

2.0 Study aim

To establish an evidence base of health visitor experiences and perceptions supporting multiple birth families.

2.1 Study objectives

- To explore the current practice of health visitors working in the United Kingdom supporting multiple birth families
- To explore the nature and extent of education and professional development received by health visitors working in the United Kingdom about supporting multiple birth families
- To inform health visitor practice to improve the provision of care and support to multiple birth families

3.0 Method

A cross-sectional, online survey of HVs in the UK was undertaken using a questionnaire via 'Online Surveys'. The study was a collaboration between the Elizabeth Bryan Multiple Births Centre (EBMBC) (Appendix one) and the Institute for Health Visiting (iHV). Using an online survey enabled the study team to access a large number of HVs practising in the UK in diverse settings who were working with a broad scope of families and communities. The timing of the survey was negotiated with the iHV to avoid clashing with other surveys that they run. The peak holiday periods were also avoided. The day-to-day management of the survey was undertaken by LA and overseen by MH. This involved close liaison with the iHV Communications Manager and the EBMBC Administrator.

4.0 Sample

It was reported in May 2019 that there were 8,100 HVs working for NHS England, 1,357 Health visitors in Scotland (Nursing Times, 2018), 876 in Wales (Sherwood, 2019) and 526 in Northern Ireland (Department of Health, 2019) (Appendix two). Consequently the optimum sample size for this study was identified by RC as being a minimum of 300 participants to provide a 5% margin of error.

4.1 Participant inclusion criteria:

Criterion	Rationale
Health visitor currently practising in UK	To address study aims and objectives

Table 1 Participant inclusion criteria

4.2 Participant exclusion criteria:

Criterion	Rationale
Health visitor currently practising outside the UK	To address study aims and objectives
Health visitor based in the UK who is not currently practising	To address study aims and objectives

Table 2 Participant exclusion criteria

5.0 Recruitment

Participants were recruited in two ways:

1. The link to the survey and participant information leaflet (Appendix three) were disseminated by the iHV which had the contact details of 9,000 HVs based in the UK. The iHV also disseminated information about the study via its social media. Agreement from the iHV to email their contacts and disseminate information about the study was secured before the study commenced. All iHV contacts received an email inviting them to participate in the survey. The email included the link to the participant information leaflet and the survey which were hosted on the EBMBC webpages of the Birmingham City University (BCU) website. The email stated that the survey was open to all HVs working in the UK. All iHV members received regular reminders inviting them to participate in the survey. Dissemination of invitations to participate to iHV members was coordinated by the iHV Communications Manager.

2. In order to access other HVs, the survey was also promoted via the EBMBC webpages, Twitter account, Special Interest Group, the Multiple Birth Foundation and personal contacts. Notification about the survey included the links to the participant information leaflet and the survey. Reminders to participate in the survey were circulated at regular intervals. Dissemination of information about the study was coordinated by LA, in conjunction with the EBMBC Administrator.

The survey was open to participants for 17 weeks. The number of respondents was reviewed at regular intervals and recruitment strategies were deployed as deemed appropriate.

6.0 Data collection

The questionnaire consisted of closed questions and Likert scales. Some open questions were also included to capture participant experiences. The questionnaire was based on the findings of an exploratory qualitative focus group study of HVs undertaken 2017-2018 by MH, JD and LA (Alamad et al, 2018). The questions in the survey related to:

- Participant demographic information such as date qualified as a health visitor, case load, number of multiple birth families on their case load, county and type of location of practice (inner city, town or rural). Information about participant names, ages, gender and exact location of work was not requested.
- Participant perceptions of the needs and challenges faced by multiple birth families.
- The challenges that participants encounter when supporting multiple birth families.
- The nature and extent of any educational or professional development the participants had received about supporting multiple birth families.
- Participant identification of any continuing professional development they felt they needed about supporting multiple birth families.

Before commencing the questionnaire, potential participants were required to tick boxes to indicate their consent to participate and to confirm that they were a health visitor currently practising in the UK. It was not possible to complete the questionnaire without confirming this information.

The questionnaire was developed by LA under the guidance of the research team. The input of MH, CA and JD ensured that the questions captured the required information. The input from RC ensured that the quantitative questions generated data that could be analysed appropriately. The questionnaire was piloted with 8 local practitioners and was refined accordingly before recruitment to the main study commenced. The pilot also enabled the research team to determine that the survey took approximately 10 – 15 minutes to complete.

At the end of the questionnaire, participants could opt to enter a prize draw for a £30.00 shopping voucher. In order to enter the draw, the participants had to upload their work email address to the survey. This was clarified on the participant information leaflet and on that particular section of the survey. The prize draw took place after the survey was completed. A member of BCU staff who was not part of the research team made the draw and the participant selected has received the voucher.

7.0 Data analysis

The survey was carried out using the 'Online Surveys' tool which acts as the primary data store. Where needed the data was extracted in csv (comma separated values) format to local machines for analysis, audit and archiving. Data sets were archived in BCU's 'OneDrive' system. Responses to the closed and Likert scale questions captured within the survey were analysed using the features of the 'Online Surveys'. This quantitative data was analysed using descriptive statistics and appropriate statistical tests were used to explore potential correlations. Analysis was based primarily on chi-square testing of the responses to see if variables such as HV location and length of time in practice led to a significant variation in experience. Where complex signals emerged as a function of parameter interactions, subset selection algorithms based on ordinal logistic regression were trialled to mine for signals. Where appropriate, inferential statistics were used to compare the data from HVs. The quantitative data analysis was undertaken by RC and LA.

Qualitative data arising from participant responses to the open questions were analysed thematically. Responses to individual questions were analysed as self-contained collections of data. The participant responses to each question were read to ensure familiarity with the content and context. Sections of the responses were then coded. New codes were created

when the data appeared to capture something different. The codes were then formed into broad themes and where appropriate, subthemes. The nature of the broad themes and subthemes for each question were largely influenced by the characteristics of the original question. However, it was ensured that the broad themes and subthemes reflected the range and breadth of participant responses, irrespective of whether they related to the original question. Once all of the responses had been coded, the coding framework was reviewed and amended for each question. LA and MH undertook the qualitative data analysis. LA, MH, JD and a health visitor / lecturer, then reviewed and agreed the themes for each question.

8.0 Ethics

In accordance with BCU procedures, Faculty Academic Ethics Committee approval was acquired. This approval incorporates provision of indemnity insurance. The process of emailing iHV contacts complied with the 2018 revisions to UK data protection legislation. 'Online Surveys' is compliant with all UK data protection laws (see <https://www.onlinesurveys.ac.uk/>). Having accessed the survey but before completing the questionnaire, potential participants were required to indicate their consent. No participant personal information was required for the survey apart from date of qualification and the type of geographical location of their practice (for example inner city or rural). Participants wishing to be entered for the prize draw had to indicate their work email address. This was clarified on the participant information leaflet and on that particular section of the survey.

It was anticipated that the survey questions would be unlikely to cause the participants to become distressed. The participant information leaflet however, identified potential sources of support. All study data (pre and post analysis) was stored on a password protected BCU computer and backed-up using one-drive. Only members of the research team had access to the raw data. It was not necessary to store hard copies of any data or participant information. In accordance with BCU policy, study data will be securely destroyed after five years. No identifiable information will be included in publications, reports or conference presentations. Where appropriate, codes were used to protect the identity of individuals or places.

9.0 Participants

The survey was completed by 290 HVs. All indicated at the beginning of the questionnaire that they had a HV qualification and were practising in the UK. Table 3 indicates participant

declared qualifications in addition to their health visitor qualification. Almost all respondents indicated that they had a nursing qualification with SRN / RGN and Adult Nursing being the most common (196/290 67.58%).

Participant qualification(s)	Number
RN Adult	63/290 (21.72%)
SRN/ RGN	60/290 (20.68%)
SRN / RGN and SCM / RM	22/290 (7.58%)
SCM / RM	12/290 (4.13%)
RN Adult and RM	4/290 (1.37%)
SRN / RGN, RSCN Child and SCM / RM	4/290 (1.37%)
SRN / RGN and RSCN	38/290 (13.10%)
RN Child	38/290 (13.10%)
RN Learning Disability Nursing	6/290 (2.06%)
RN Mental Health	8/290 (2.75%)
SRN/RGN and Mental Health	3/290 (1.03%)
RN Adult and Mental Health	1/290 (0.34%)
SRN / RGN, SCM / RM and Mental Health	1/290 (0.34%)
RN Child and Mental Health	1/290 (0.34%)
No other additional qualifications identified HV / SCPHN only	29/290 (10%)

Table 3 Participant qualification in addition to health visitor qualification

The year that participants attained the HV qualification (285/290) ranged from 1981 to 2018 (Mean 2008, Median 2011, Mode 2014).

Table 4 indicates the length of time that participants had practised as a HV, excluding breaks in service for example for maternity leave or extended sick leave. Nearly two thirds of the respondents had been practising as a HV for five years or more.

Length of time practising as a health visitor 288/290	Years
Less than 2 years	31 (10.76%)
2 – 5 years	76 (26.39%)
5 – 10 years	61 (21.18%)
More than 10 years	120 (41.66%)

Table 4 Length of time practising as a health visitor

For the purposes of data analysis, the responses within Table 4 were divided into two categories; ‘Less than five years’ and ‘five years or more’. Cross-analysis using a Chi square of independence between variables via R was subsequently undertaken where relevant to determine if length of practice had any influence on the survey responses as outlined in this report.

As indicated in Table 5, most participants were practising in a town.

Practice setting 285/290	Number
Rural	37 (12.98%)
Town	172 (49.02%)
Inner city	76 (26.66%)

Table 5 Participant practice setting

Although the sample included representation from all four nations of the UK, most of the participants were from England (Table 6).

Country of practice (289/290)	Number
England	259 (89.61%)
Northern Ireland	1 (0.35%)
Scotland	15 (5.19%)
Wales	14 (4.84%)

Table 6 Participant country of practice

With regard to the HVs practising in England, 41/48 of the counties are represented in the sample. Just under half of the HVs were practising in the south of England (Table 7).

Area of practice in England	Number
North	56/259 (21.62%)
Central	82/259 (31.66%)
South	121/259 (46.71%)

Table 7 Participant area of practice in England

10.0 Findings

The quantitative and qualitative findings are presented. The quantitative findings are presented both for the whole cohort of HVs and also where relevant separately for example, length of HV practice or personal experience of multiple births. To further explore the impact of length of HV practice or personal experience of multiple births on HV practice, statistical significance has been measured and is expressed using p values.

A p value enables the probability of an event occurring by chance to be measured. A p value of 0.05 or less, indicates that an event is unlikely to have occurred by chance and is therefore statistically significant (Harris and Taylor, 2014). The smaller the p-value, the greater the statistical significance.

10.1 Health visitor multiple birth caseload

At the time of the survey, most of the HVs had twins on their caseload (250/284, 88.02%). In contrast, 47/278 (16.90%) HVs had triplets on their caseload and 6/278 (2.15%) had quadruplets.

Figure 1 indicates that for just over a fifth of HVs (21%) the current number of multiples on their caseload was less than usual. However, for most of the remainder the number was static (67%).

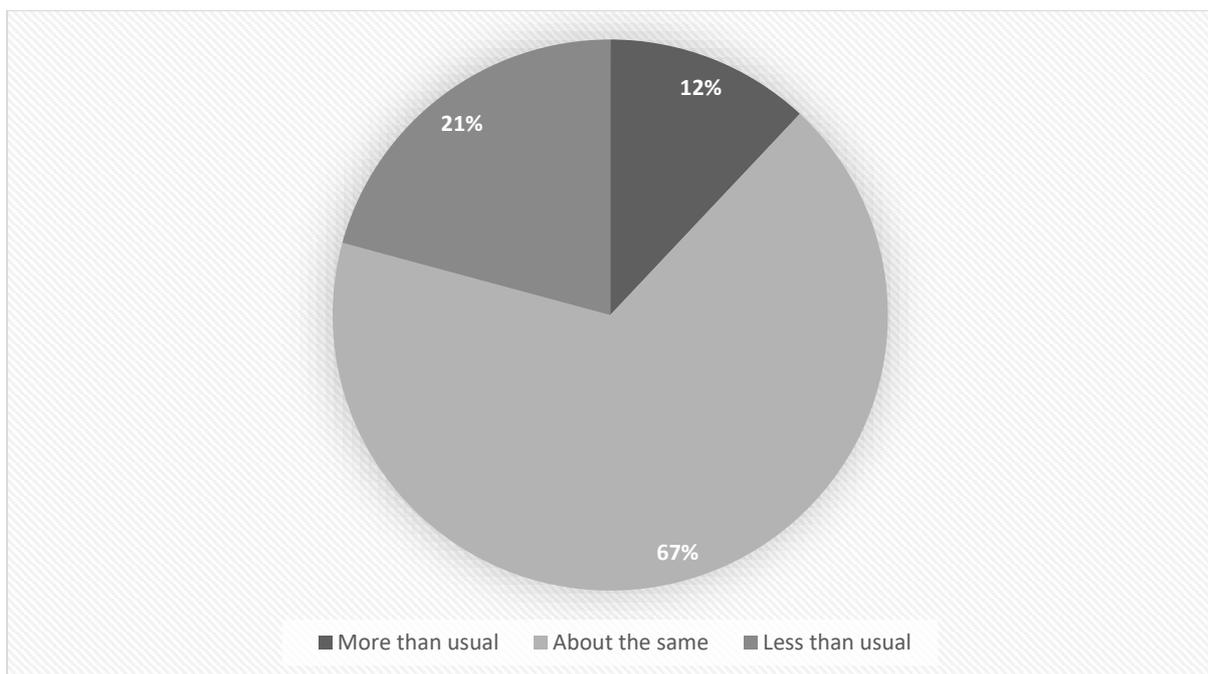


Figure 1 Health visitor multiples caseload

10.2 Shaping current health visitor multiple birth practice

A previous small-scale study with HVs indicated a lack of content relating to multiple births in HV education (Alamad et al, 2018). It was therefore considered important to see if this was an issue nationally. Figure 2 indicates that only 2% of respondents had received one or more specific sessions about multiples during their HV programme. Whilst just over a third had been educated about multiples via occasional references within sessions when relevant (35%), most commonly HVs had not received content about multiples at all (63%). For HVs who had been qualified for five years or less, they were less likely to have attended CPD events with multiple birth content (p value <0.005).

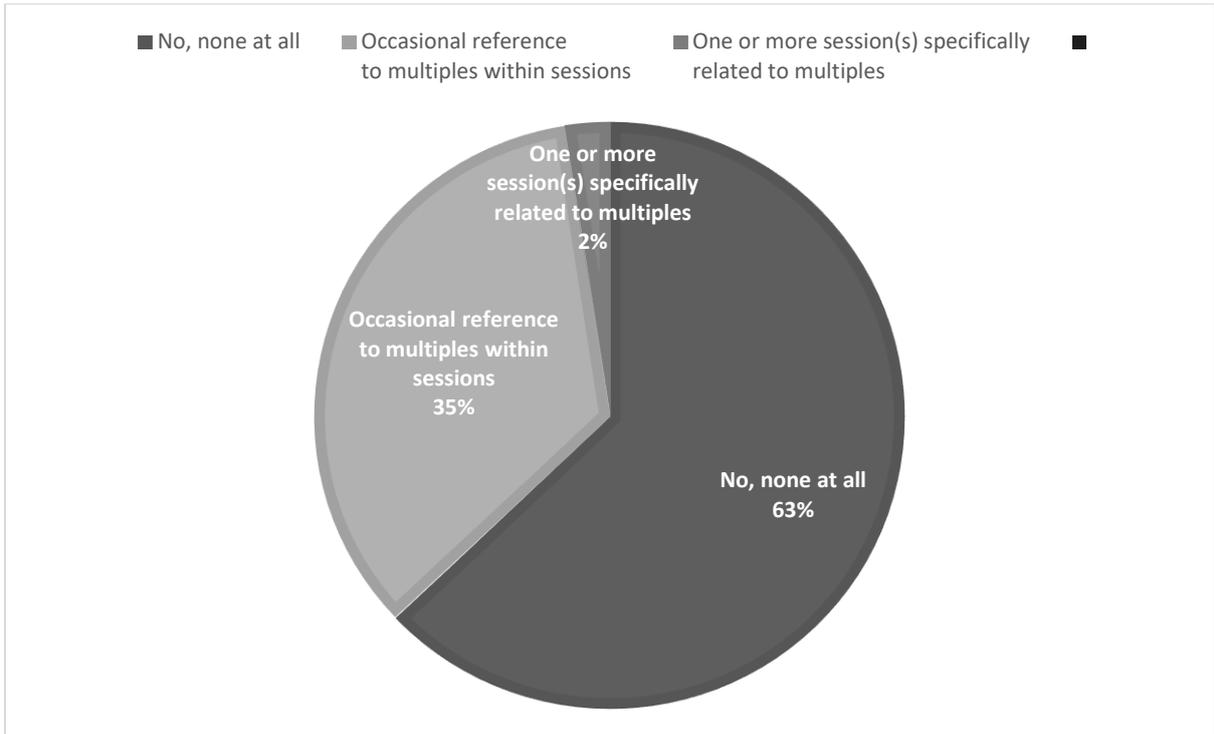


Figure 2 Education about multiples in health visitor programme

These findings were echoed in relation to HV continuing professional development (Figure 3)

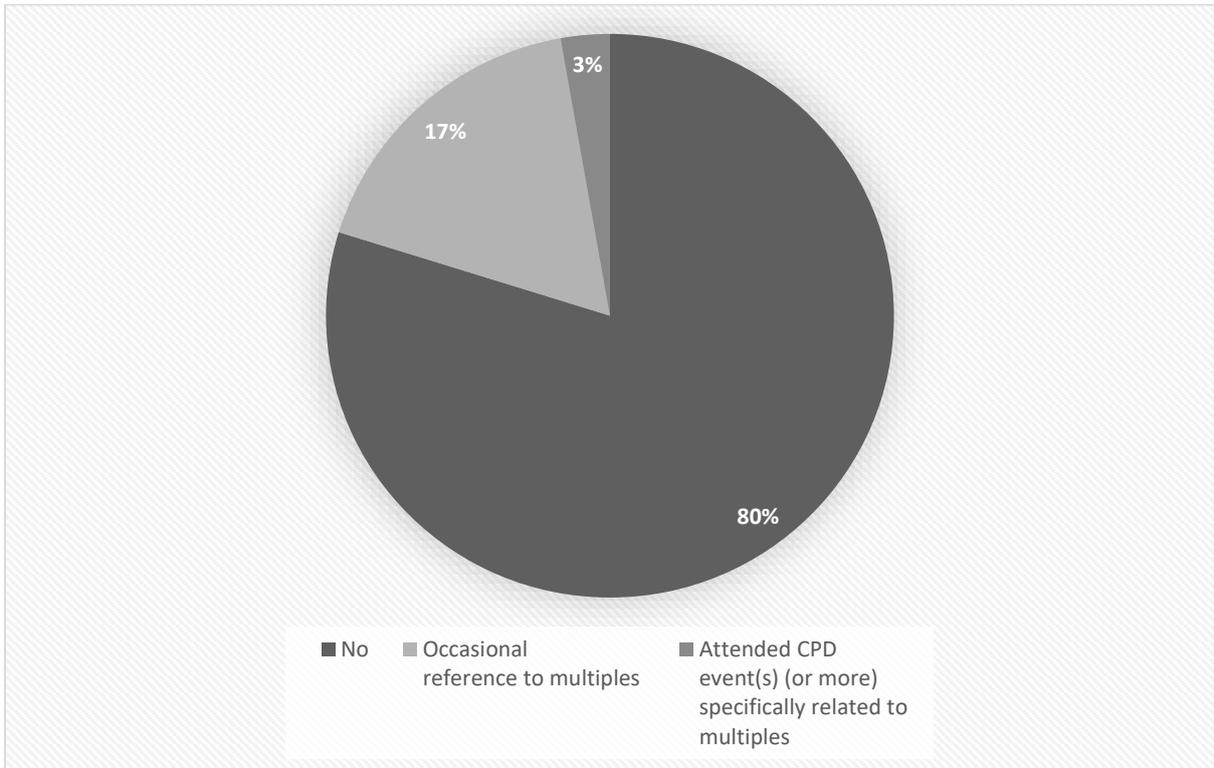


Figure 3 Health visitor continuing professional development about multiples

The HVs were asked upon what they based their current practice with multiple birth families. As it was possible to tick all relevant answers, there was a degree of spread across all of the possible responses. Nonetheless, as Figure 4 shows there is congruence with their responses regarding their HV education and continuing professional development. The two most frequent responses were ‘professional experience’ and ‘discussion with colleagues’.

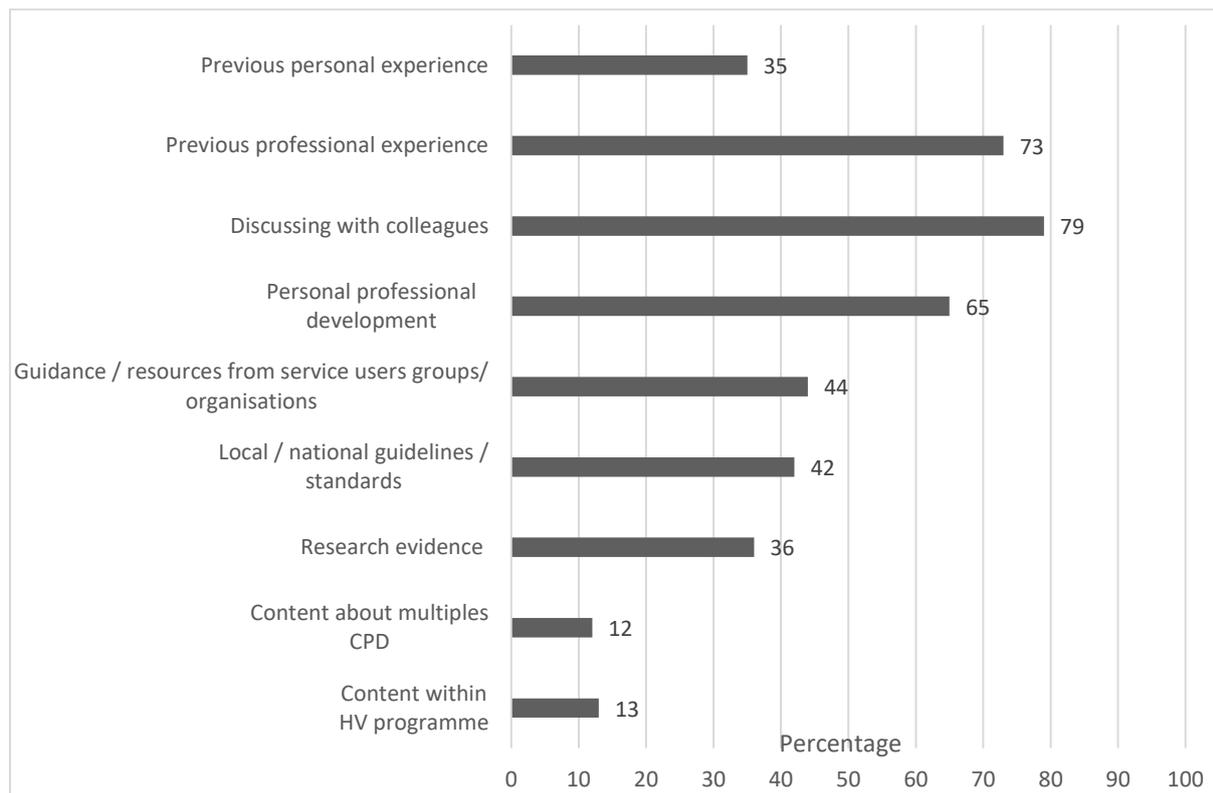


Figure 4 Factors influencing health visitor practice with multiple birth families

In contrast to being taught about multiples, the HVs were asked if they included information about multiples in their teaching. Figure 5 indicates a 5% difference between HVs who include information about multiples and those who only do so when asked. Nearly 20% of HVs did not mention multiples when teaching at all. Those HV who do mention multiples while teaching are more likely to be those qualified for over 5 years (p value <0.0005).

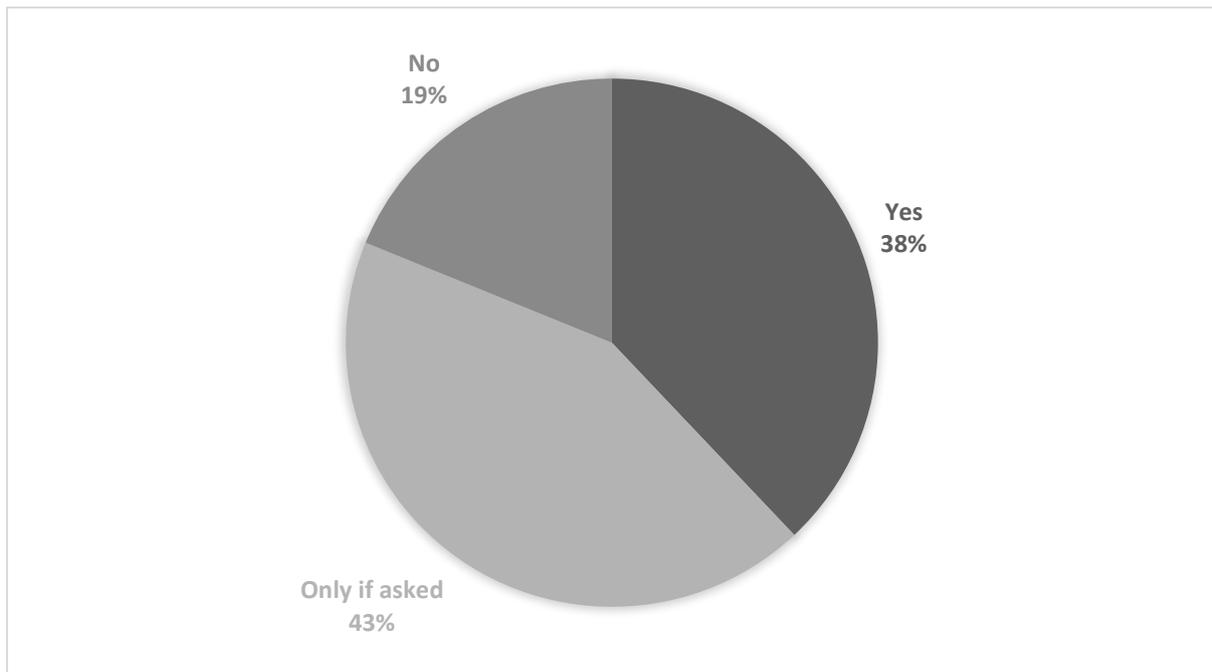


Figure 5 Health visitor inclusion of content about multiples in their teaching

As illustrated in Figure 6, when asked about their personal experience of multiples, most HVs did not have any multiples amongst their family and friends (47%). However, of the remaining 53% of respondents, 12% of the HVs were parents of multiples.

The answers within the Other category were varied, but generally consisted of people detailing non-HV professional experiences.

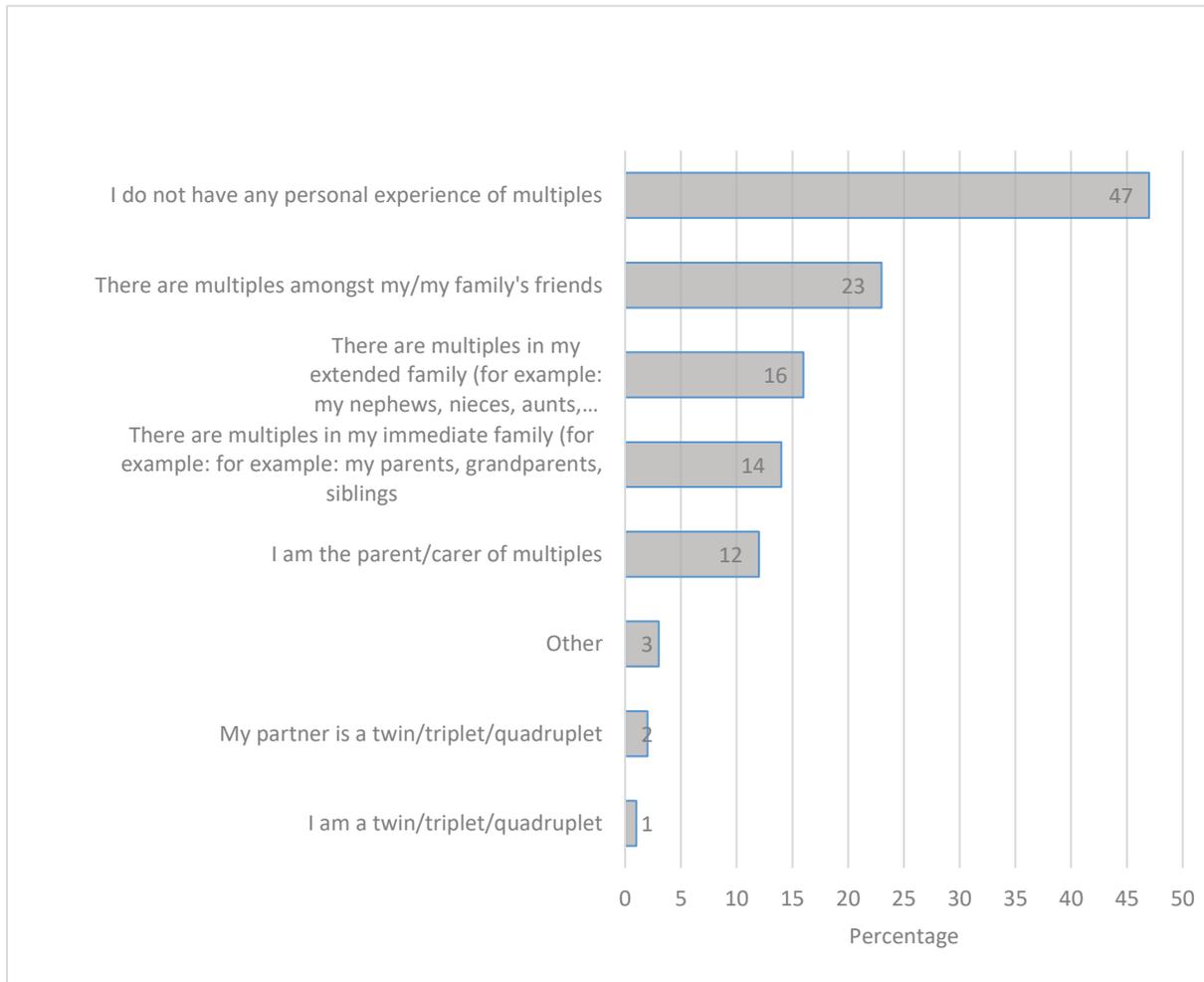


Figure 6 Health visitor personal experience of multiples

The HVs with personal experience of multiples were asked to expand upon the ways in which this impacted on their work with multiple birth families. From the free-text responses, four themes were generated; 'understanding challenges', 'improving my practice', 'promoting individuality of multiple birth children' and 'no impact'.

Many of the HV responses related to being able to understand the challenges that multiple birth families encounter and the practical and emotional difficulties that they face.

“I am a Mother of triplets, which has made me much more aware of how challenging it can be when one child is at a different development stage to another, one ready for weaning and one not, one capable of walking outside and one not, one ready for potty training and one not. Understanding parents worry as constantly comparing one child’s abilities to their sibling of the same age. I have a better understanding of the challenges of breastfeeding multiples, I understand how stressful the smaller things are such as having to have two screaming babies or more stripped to be weighed at clinic, and then having to dress two screaming babies whilst there is a queue behind Mum. The difficulties with two babies sharing a room and waking each other, the list is endless” 0191

“i have greater empathy and can give practical tips I understand the stress and anxiety involved in parenting multiples, and the guilt of not being able to give exclusive love to one” 7178

Within the theme ‘improving my practice’, the HVs recounted how their personal experience of multiple birth experiences led them to adapting their practice.

“Helped my families past and present with twins find coping techniques, give them hints and tips and advice which is not provided in books or guidance websites which are all singleton orientated” 0691

“Additional home visits for weights, not easy to get to clinics and appointments, liaising with GP to offer appointments at more convenient times in order to have family members able to help, aware that current guidance on bottle feeds isn't parent friendly, higher incidence of post-natal depression more pressure on self as mum” 1269

In the theme ‘promoting individuality of multiple birth children’ the HVs drew on their personal experiences to explain the importance of the multiple birth children establishing their own identity.

“As an identical twin I am aware of the need for twins to have the freedom to develop their own sense of self outside of the relationship” 6168

“I acknowledge that babies need to be considered as individuals in their own right. They may be twins but they have different needs. Parents also need support to recognise the importance of this. Parents and professionals need to accept that one rule does not apply. However there has to be some compromise as parents can get very tired if they double their work” 6864

In contrast, a few HVs felt that their experiences of multiple birth had not influenced their practice.

“It was so long ago, I don’t really use my family members as an example on which to base practice” 7507

10.3 Adapting health visitor practice to support multiple birth families

Very few HVs indicated that their practice areas had a specific care pathway for families with multiples (5%). Furthermore, less than 1% of HVs indicated that their practice had a ‘multiple births champion’ or lead for multiple births.

During the exploratory focus groups (Alamad et al, 2018), several HVs voiced concern at how difficult it could be logistically for some multiple birth parents to access clinic-based HV services. However, 86% of respondents in this survey, considered their clinic setting to be accessible.

Figure 7 shows that most HVs indicated that families were able to have appointments that were either concurrent or combined (85%). Yet for 9% of respondents, this was not current practice and for a smaller amount of HVs (6%) it was only sometimes possible.

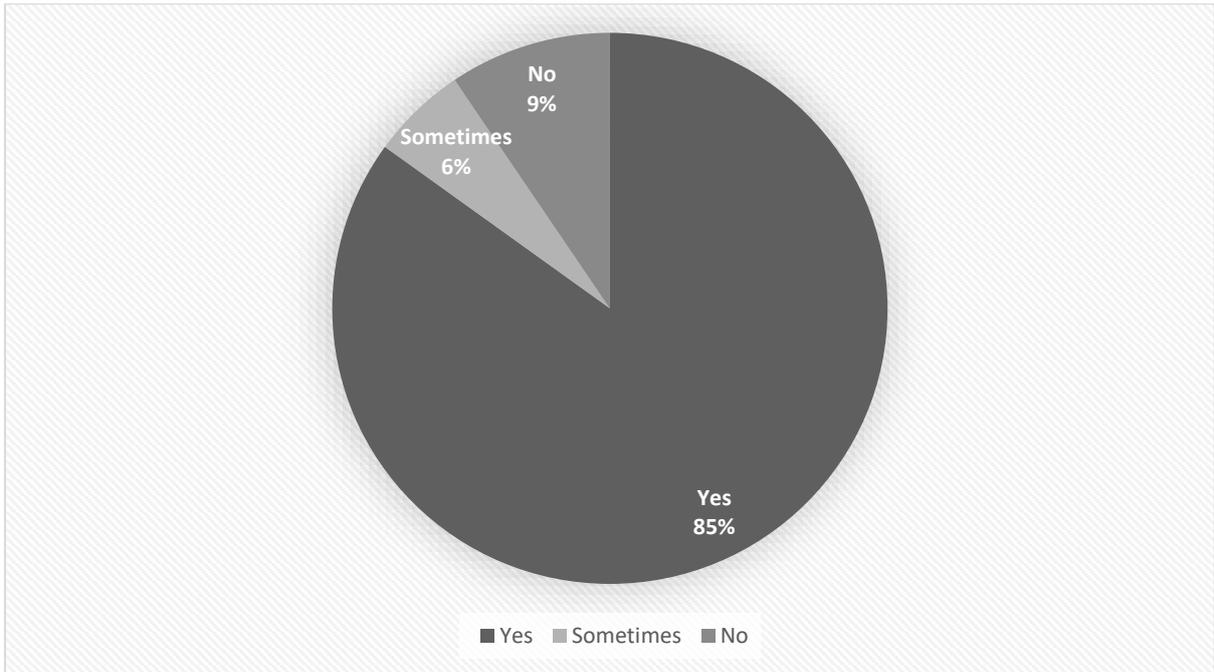


Figure 7 Availability of concurrent or consecutive health visitor clinic appointments for multiple birth families

Health visitors who were unable to offer consecutive or combined appointments were asked to elaborate on why this was the case. For most respondents home visits were always arranged for multiple birth families. For some HVs arranging combined or consecutive appointments was not possible.

“Appointments are sent out from central admin team who do not take into consideration multiples” 3190

10.4 Health visitor experiences working with multiple birth families

As shown in Figure 8, the 0-12 month period was cited by the HVs as the most difficult time period for parents of multiples. Just under 10% felt that the early toddler period of 13-24 months was most challenging, with decreasing numbers of HVs selecting the 25-36 month and 37-48 month period respectively. Although the 49-60 month period covers the time when children start school, this was not selected by the HVs.

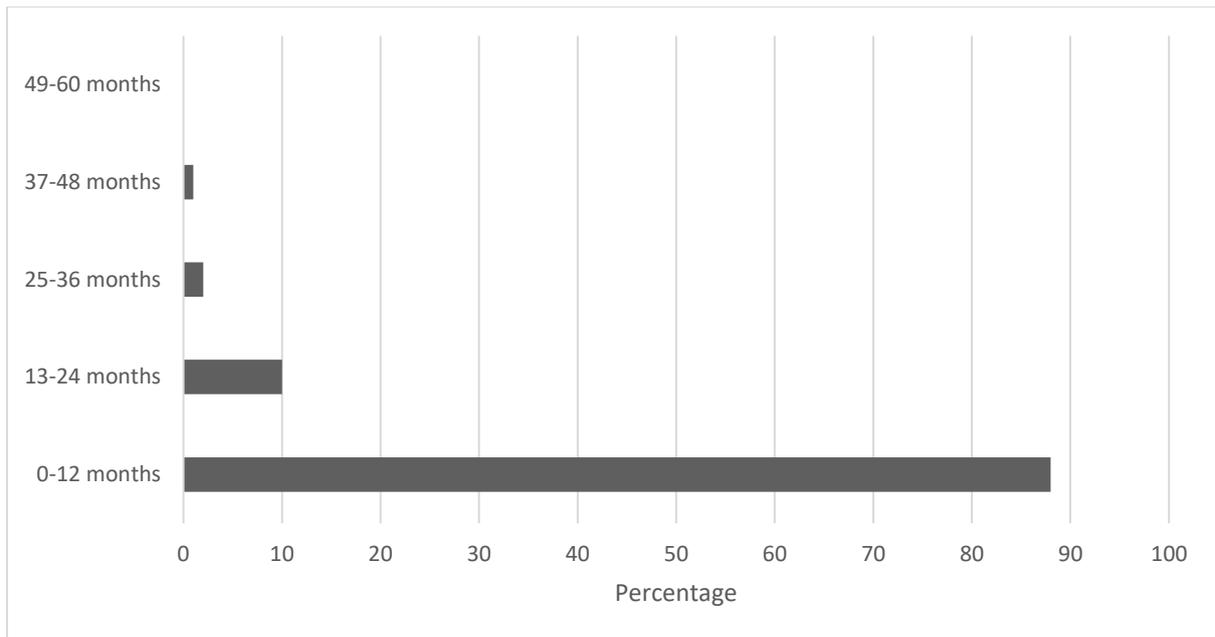


Figure 8 Health visitor perception of most challenging time period for multiple birth families

The HVs were asked to identify the positive aspects for them of working with multiple birth families (Figure 9) and there was an even spread of responses. The most frequent responses were seeing parents’ confidence grow (61%), developing their skills and knowledge (58%) and greater continuity of care experienced (48%).

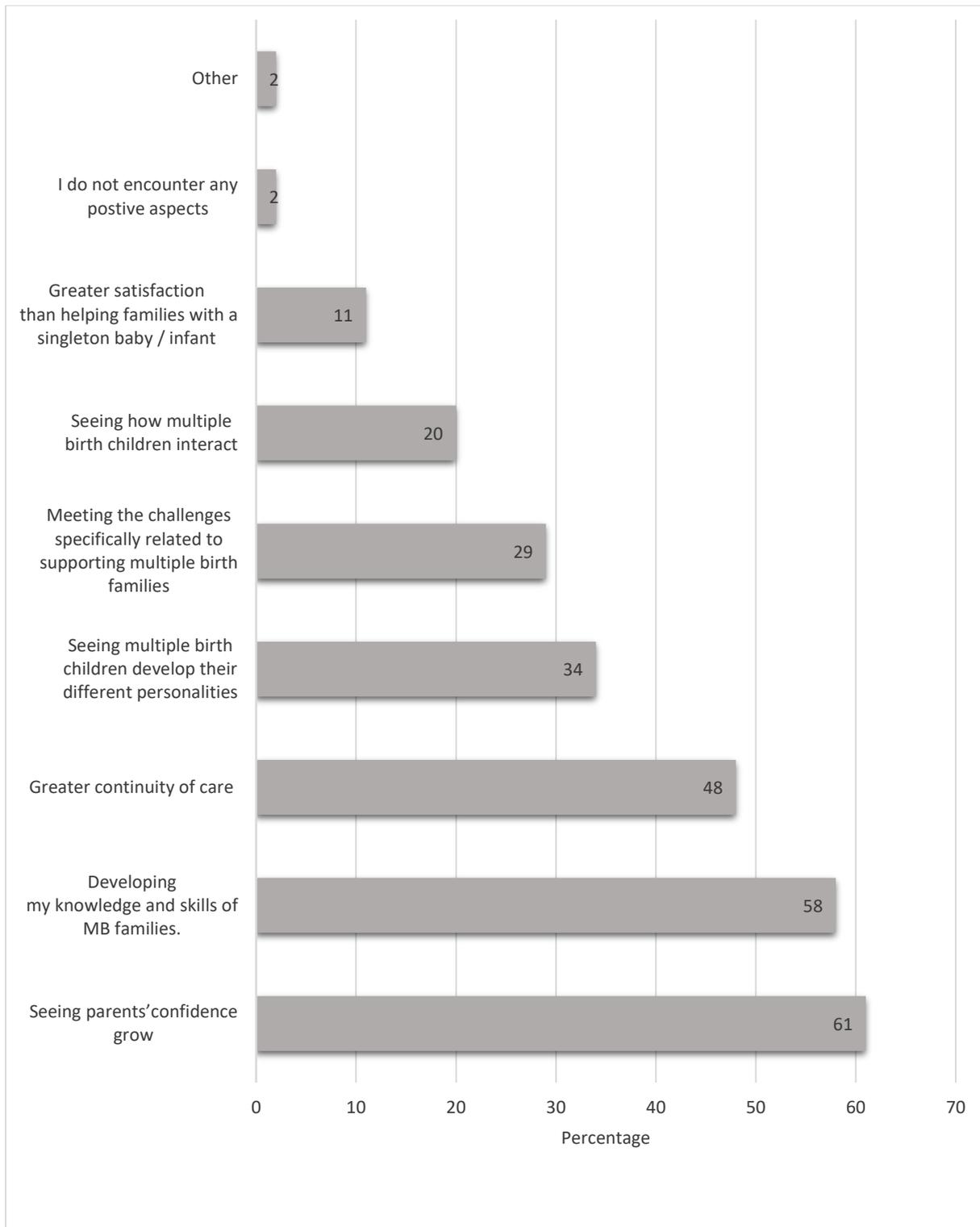


Figure 9 Positive aspects for health visitors of working with multiple birth families

Using the 'other' and subsequent free-text option, a few HVs took the opportunity to expand on their responses about working with multiple birth families. Some indicated that this enabled them to develop their personal interests. Others, particularly those with personal experience of multiple births identified the rewards they gained from working with these families:

"Interested in supporting children with special needs, not uncommon in multiple births" 2813

"To know they have someone they can call / text if they need any kind of advice / a cry / general support etc. Someone who has been through it and knows how they are feeling" 7672

With regard to the challenges and difficulties that HVs encountered working with multiple birth families, the multiple answer options generated an even distribution of responses (Figure 10). Nonetheless, it was clear that the additional time required to provide care for multiple birth families was the most prominent challenge. Extra work was generated in terms of double appointment times (23%), needing more home visits (18%) and persuading managers to allow this extra time (8%). Again, length of time in practice influenced the answers selected. Those qualified less than 5 years were more likely to have a lack of awareness about third sector support (p value <0.0005). These participants were also more likely to feel challenged by a lack of knowledge (p value <0.005) and lack of experience pertaining to multiple births (p value <0.005).

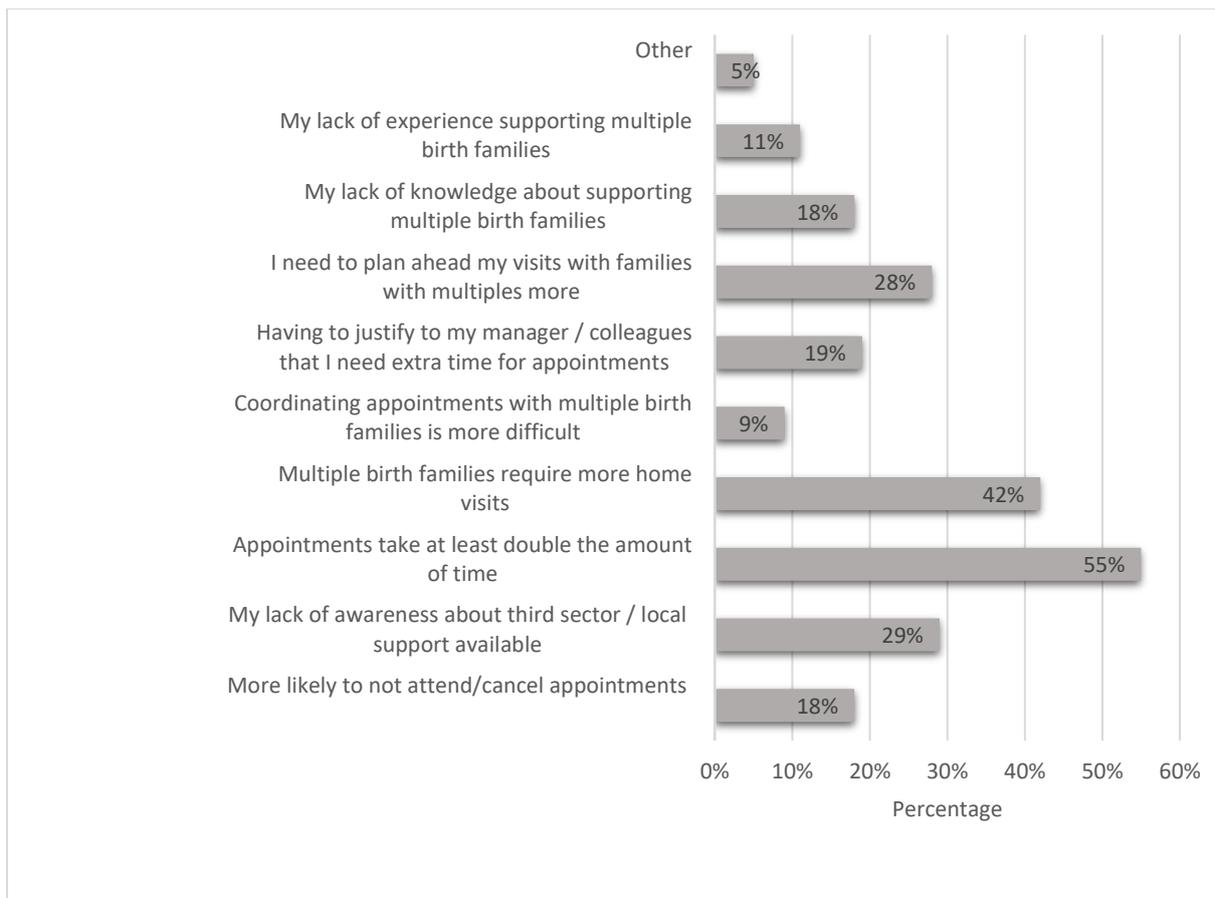


Figure 10 The challenges / difficulties that you as a HV encounter when working with multiple birth families

Using the ‘other’ and subsequent free-text option some HVs elaborated on the challenges they encountered when working with MB families. Three themes were identified. The first theme ‘tailoring support’ illustrated the ways in which the HVs adapted their care and support to meet the specific needs of a family:

“Co-ordinating with other services and appointments” 2813

“we need to tailor our service to individual families needs” 0561

Within the second theme, ‘promoting individuality’ HVs described endeavouring to acknowledge the individuality of multiple birth children:

“Trying to remember that they ((multiple birth children)) are individuals and not getting mixed up with which twin they ((parents)) are talking about” 4186

In the final theme, ‘lack of resources’ HVs described trying to provide effective support with limited resources:

“Not commissioned to provide a specific service to multiple birth families” 8589

“No local support groups to offer them” 0691

The HVs were asked which aspects of parenting that parents of multiples wanted information and guidance about (Figure 11). The available responses have been collated into four categories: Caring for multiple birth children, Resource/Financial Issues, Child Development and Parental/Family issues. Caring for multiple birth children was the most frequently cited category with 60% of HVs stating that parents needed information and guidance about breastfeeding, bottle-feeding and weaning onto solids. In addition to this, managing crying and developing a relationship with both children were also included in this category. The HVs also indicated that multiple birth families want information and guidance about sleep and bed-sharing.

Child development, particularly concerns about differences in the development of the multiple birth children, was the next most frequently cited category constituting 18% of responses. This category included promoting the individuality of each child, one child being smaller than the other and the impact of multiple birth on child development. Shortly behind that, at 12%, was the resource and financial needs of parents themselves, including negotiating public transport, financial issues and when to return to work. The final category, Parental/Family issues garnered 10% of responses. This category encompassed wider family issues such as negotiating the needs of siblings and parents feeling a loss of identity.

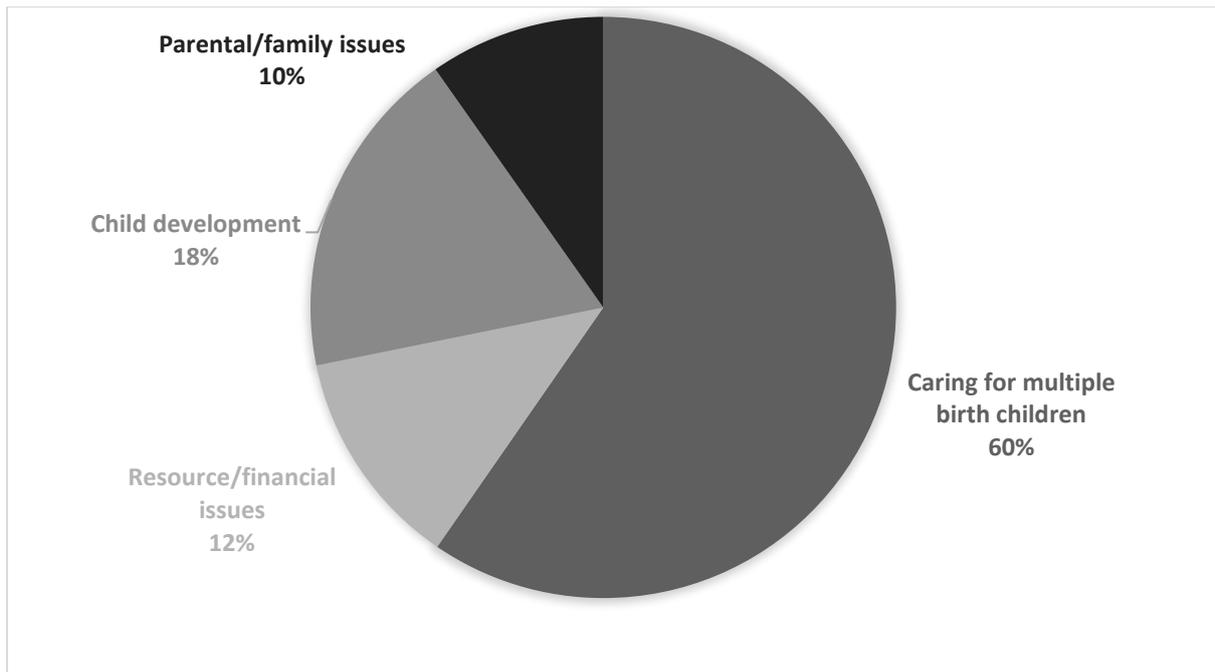


Figure 11 The aspects of parenting HVs find parents of multiples want information/guidance about

As shown in Figure 12, aspects of parenting multiples that the HVs wanted more information about generated a broader range of responses. The responses were again placed into four categories: Caring for multiple birth children, Resource/Financial Issues, Child Development and Parental/Family issues. Compared to parents, there was an increase in the numbers of HVs wanting information about supporting family issues, with a quarter of responses related to wanting information on this. Conversely, resources and financial issues received the smallest number of responses, with only 5% of HVs stating they needed more knowledge on this topic.

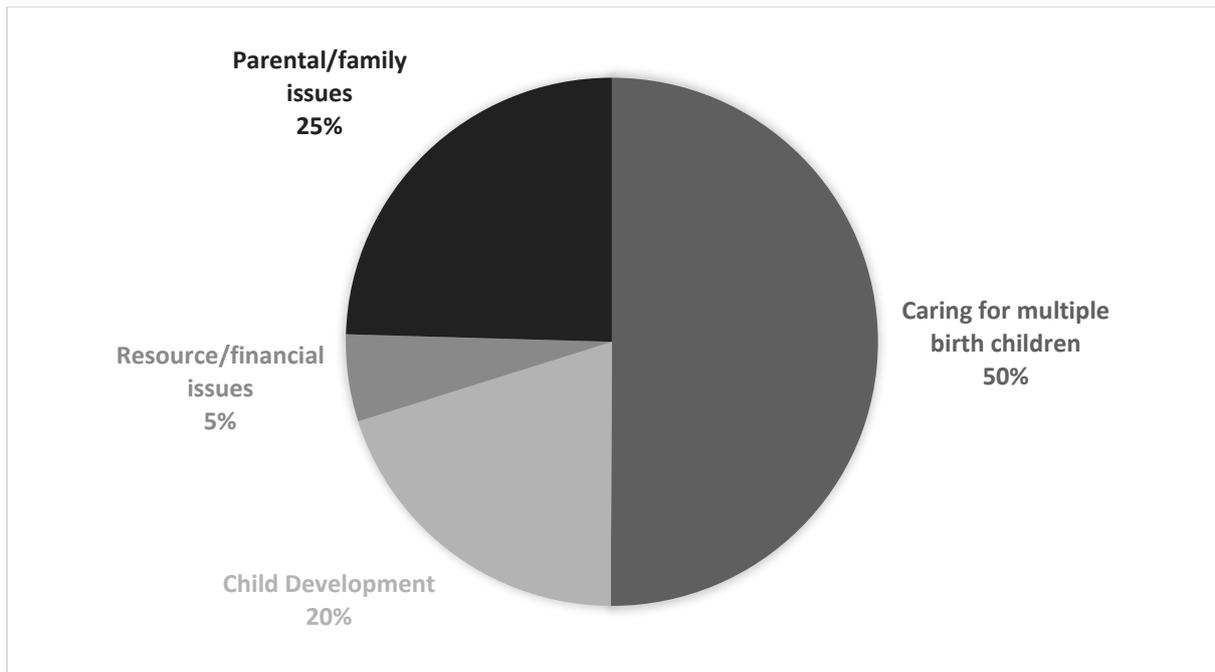


Figure 12 The aspects of parenting multiples HV feel they need more information about

The HVs identified a number of resources that they felt would help facilitate the support they gave to multiple birth families (Figure 13). A directory of third sector support services was the most frequent suggestion (23%) along with national or local guidelines (18%) or a multiple birth care pathway (17%). Those who had been qualified for 5 years or more, were more likely to indicate that CPD events on multiple birth would be a helpful source of support for them (p value <0.005)

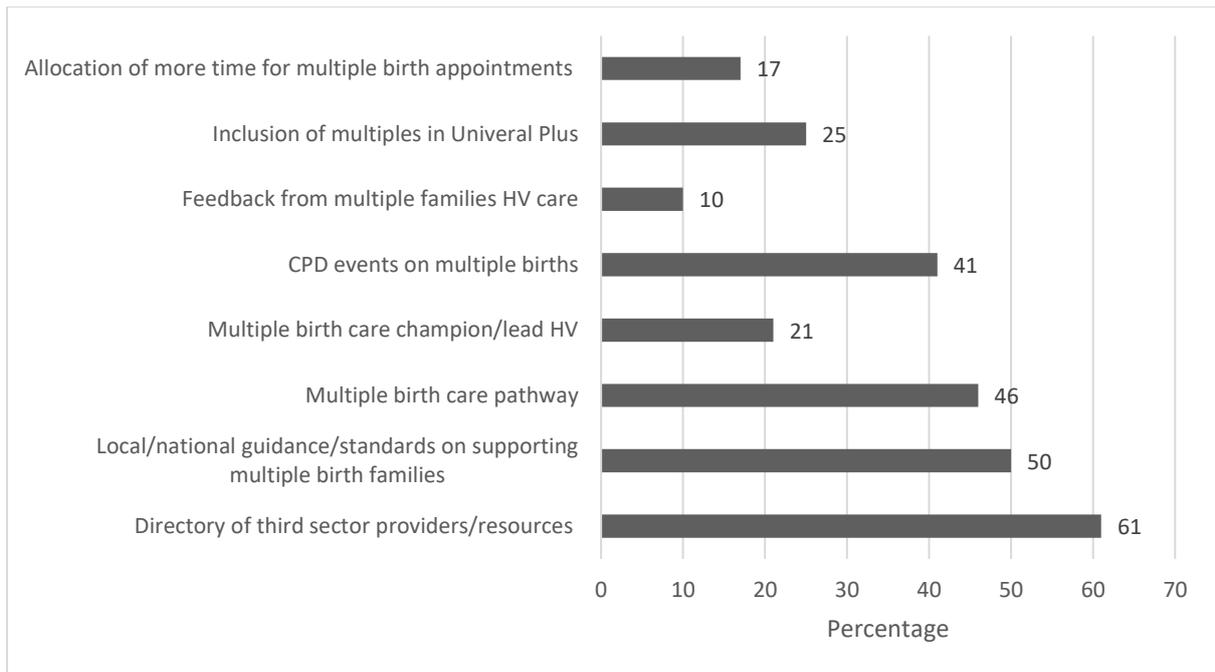


Figure 13 The guidance / information / resources HVs state would help them when working with multiple birth families

Caring for multiple birth families can sometimes involve ‘hidden work’ such as hands-on childcare which does not fit the current remit of the HV role (Alamad et al, 2018). Nearly 100% of respondents ticked at least one example of additional work they undertook while visiting HV families. As indicated in Figure 14, the most frequent examples of this type of activity that the HVs gave were playing with/distracting other siblings (86%), feeding babies and dressing children (55% and 56% respectively). Over half of respondents (56%) also visited multiple birth families with a colleague or nursery nurse to share the workload.

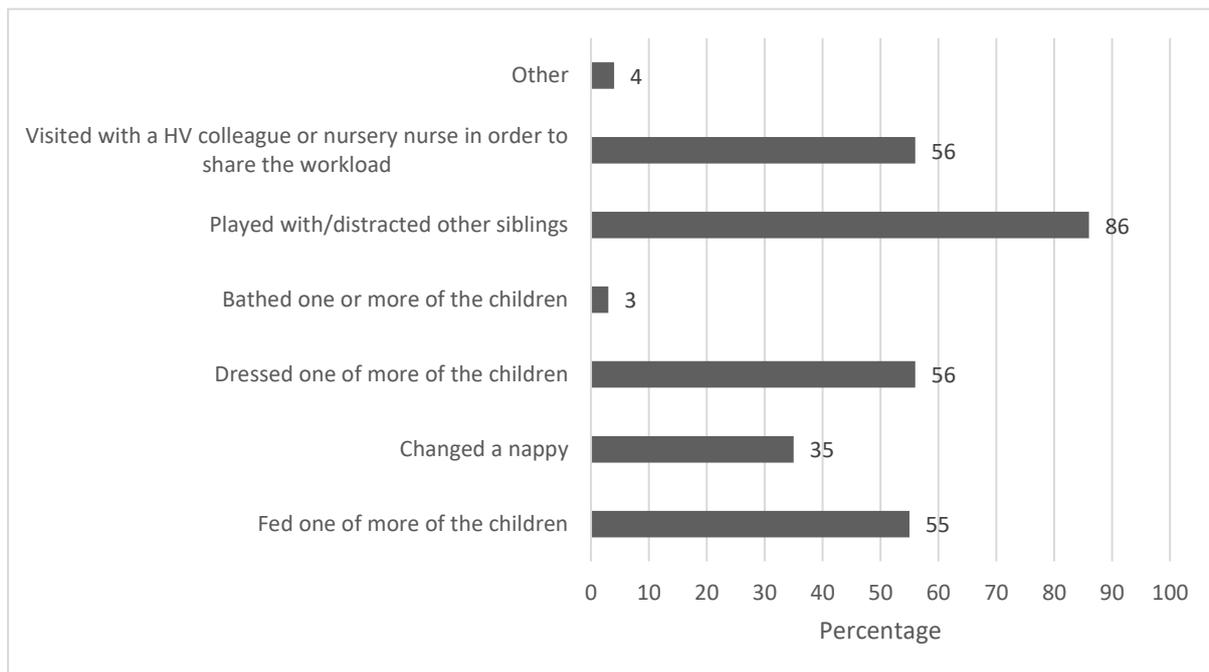


Figure 14 Additional work undertaken by HVs during home visits with a multiple birth family

Responding to the ‘other’ option, HVs most commonly described holding one of the children or adding in extra visits:

“Helped by holding children between weighing whilst mum attended to the others” 2333

“Visited above 5 mandated visits so as to support mum especially once dad has returned to work and mum is alone at home with no support” 9544

In contrast, one HV commented about feeling uncertain about how offers of help would be received by a mother:

“I have been very tempted to help but only if have been asked have I helped as mum may feel undermined if I help” 4186

Feelings of isolation can be quite common in new parents of multiples, with parents appreciating support from family and friends (Harvey et al, 2014). Contact with other multiple birth families can therefore be very beneficial. As shown in Figure 15, 24% of HVs stated that they introduced parents to other multiple birth families, whilst 34% did this only sometimes.

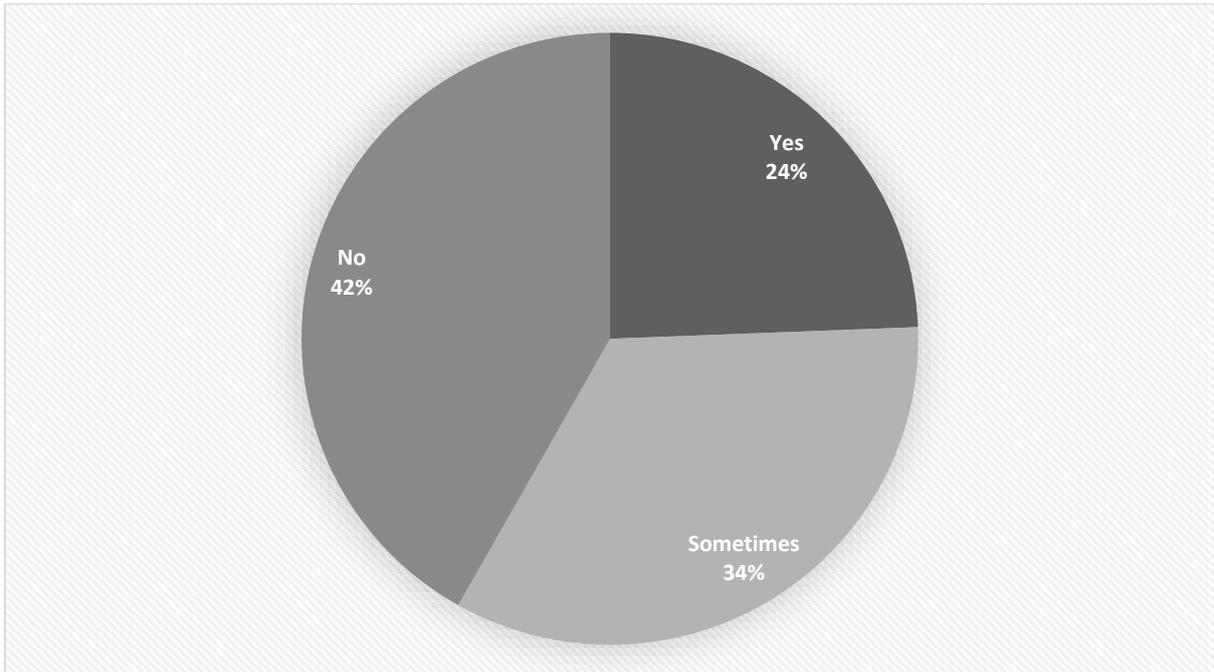


Figure 15 The proportion of HVs who introduce multiple birth families to other specific, local multiple birth families.

The HVs who did not introduce multiple birth families to each other were asked to state why and four themes were identified: ‘parental choice’, ‘I don’t know other MB families’, ‘MB family groups’ and ‘barriers’.

Within the theme ‘parental choice’, a few HVs indicated that they had not introduced multiple birth families to each other because they had not indicated that they wanted this:

“Parents have not asked for this” 4945

Within the theme ‘I don’t know other multiple birth families’, some HVs said they did not have sufficient knowledge of local families in order to do this:

“I do not know enough multiple birth families to introduce” 1450

The theme ‘multiple birth family groups’ established that rather than introduce families to each, several HVs recommended to families that they join a local family support group:

“We have a multiples group at the children’s centre and I encourage parents to attend” 0933

“Inappropriate in case they don't get on. Much better to advise them about multiple birth groups and allow them to meet their own friends” 7044

The largest theme was ‘barriers’. Within this theme, the HVs described the barriers that they felt prevented them from introducing families to each other. These barriers centred around lack of HV time, not being ‘allowed’ to do this and concerns about confidentiality:

“I am no longer allowed or have the time to do this” 7855

“No protocol to do this in place” 3906

“Introductions are tricky due to the need to gain consent from all parties” 3905

Introducing families to local multiple birth groups could be an alternative to introducing families to each other and just over half of the HVs did this (55%) A further 15% sometimes provided information about local groups (Figure 16).

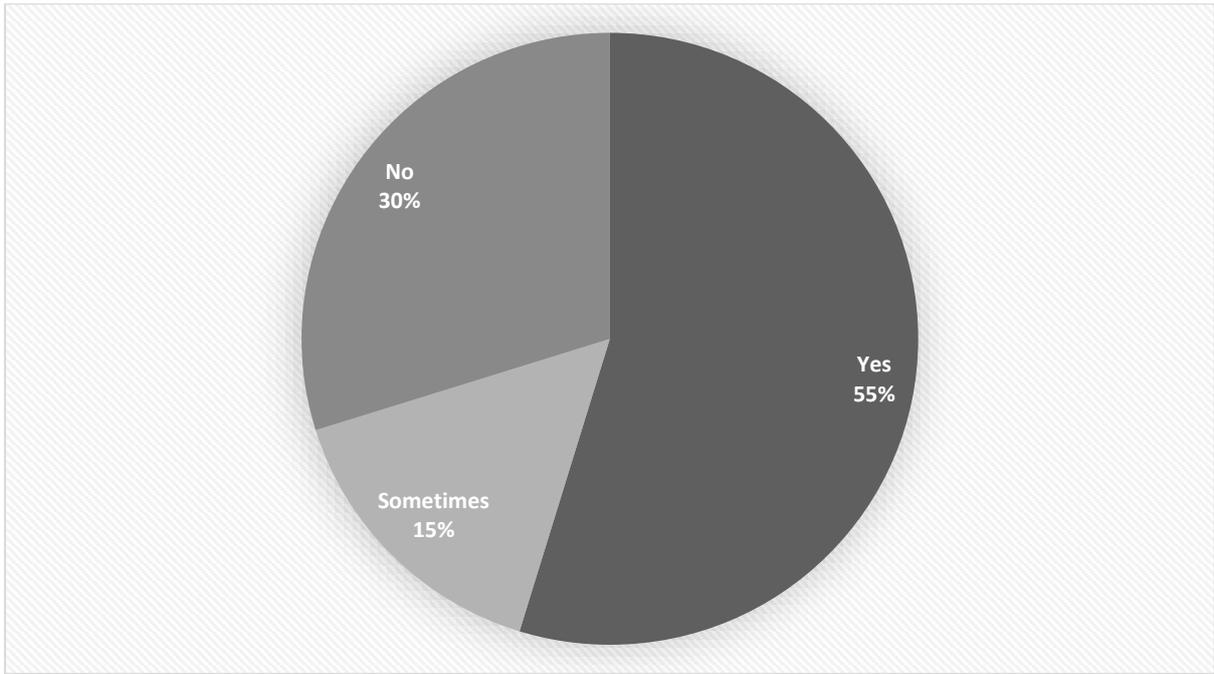


Figure 16 The provision of information about local multiple birth groups by HVs when working with multiple birth families

Within the free-text option, the HVs explained why they did not introduce families to local groups. The most common reason was because an affordable local group was not accessible:

“The one group available specifically for MB is not local to the very deprived area I work and is accessible only by 3 buses if clients don’t drive” 8292

Most HVs did however, provide multiple birth parents with information about national organisations (68%). A further 15% sometimes provided this information (Figure 17).

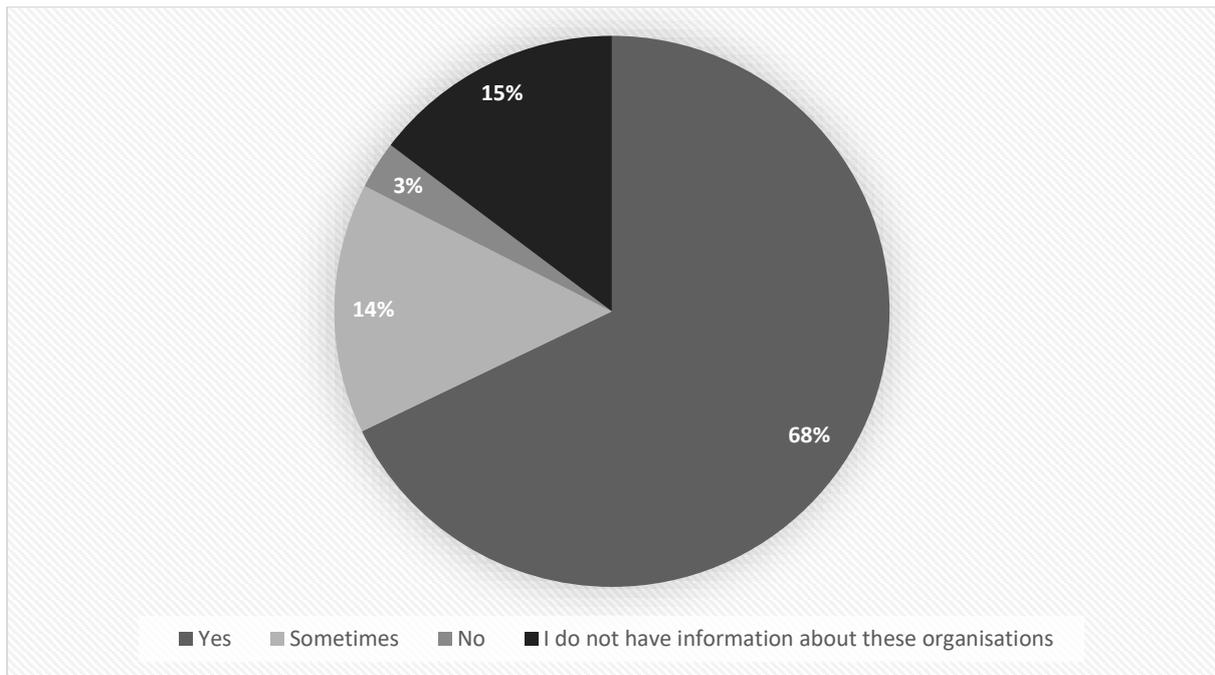


Figure 17 Health visitor provision of information about national multiple birth organisations

Approximately a third of HVs provided examples of good/innovative multiple birth-related practice within their team. These answers could be categorised into three themes: Creating or Signposting Community Support, Adapting Practice and Use of Information. There were also 18 answers which were categorised as not relevant as they did not answer the question.

Within the Adapting Practice theme, HVs discussed how they altered their practice to meet the needs of MB families.

“I promote local linking of multiple birth parents, offer home visits for developmental checks when possible.” 0413

“Using myself as an example, I was supporting a family with triplets, I always planned my visits for afternoon feeding time as this allowed me to help Mum, build a positive relationship with Mum, and she was able to openly discuss concerns she may have in regard to the triplets or herself in a relaxed manner.” 7002

An alternative way of adapting practice was to either extend the time of visits or increase the number of contacts.

“Working outside commissioned visits to provide more support.” 8589

“We have a pathway available that provides enhanced package of care as required. LON 2a (name of care package.) Parents can step on or off. We are aware [there is] likely to be an increase in low mood and unrealistic expectations so offer the service up to 3 antenatal visits and fortnightly visits to support as required to monthly. Involve CNMs and often refer to other services such as home start to provide befriending service to help mums get out and attend groups or support them as required” 7465

Many of the responses within Creating/Signposting Community Support Featured HVs utilising their local knowledge to direct families towards a variety of sources of support.

“Linking families up with other multiple families in the local area” 4251

“We discuss local groups available- including private groups for multiples I can give advice/support for practical ideas” 7672

Some HVs had gone beyond signposting community support, to creating community support themselves.

“I have set up a support group and the mothers have a supportive closed Facebook peer support group. The mothers who now have school aged twins continue to attend the group as a support for the new mothers. I liaise and advertise with the midwifery and HV teams.” 5009

“when I worked in X we had over 30 multiple birth families under two in our area so I organised a one off group with professionals from speech and language, development centre, benefits centre and council support and invited all groups so they could then meet each other and families could liaise.” 6575

The final theme, Use of Information, was two examples of HVs within the team with extensive personal knowledge of caring for twins being used as a source of information.

“A HV in our team had twins and is a twin herself and has lots of knowledge about breast feeding twins.” 2977

“Colleague is parent of you (?two) sets of twins therefore regarded as an unofficial champion which can be utilised for practical advice” 9190

The final free-text response question of the survey asked the HVs if there was anything else about their experiences working with multiple birth families that they wished to document. Just under a third of respondents (86/290) took the opportunity to tell us about their experiences. Three themes were identified from the analysis of these data.

‘Personal / professional experiences’ was the largest theme. It describes in a direct way HV experiences and the impact on themselves of working with multiple birth families. Some HVs had previously run dedicated support groups. Others described the challenges they encountered and the personal rewards they experienced when trying to provide the best support possible to multiple birth families. Some described the frustration they felt when their colleagues or managers did not recognise the specific needs of these families. Whilst some HVs related their practice to their personal experience of multiple birth, others identified their perceived lack of knowledge.

“I do find it challenging as feel have to justify why doing extra visit, if asked but also very rewarding aspect of the job especially seeing the families thrive” 1269

“Sometimes feel I am under skilled as a practitioner to support multiples fully due to limited knowledge and time constraints” 5347

“Working with multiple birth families can sometimes be overwhelming, especially if it's a first time mother, and on her own” 5289

“As a multiple mum I felt my HV was clueless I would like to change this for my multiples mums. As a student HV as part of my work I set up a multiples group but the local sure start centre had an overhaul and it couldn't continue” 0691

The second theme 'service provision' explores the impact of the withdrawal of services for multiple birth families over recent years, current service provision and HV suggestions about the ways in which support for families could be improved.

"A care pathway of optional extra visits would be very helpful" 0413

"I think they do need more support but staff shortages reduce the ability to offer this" 9152

"Accessing services/groups for non-English speaking parents of multiples biggest challenge I come across" 2333

"Clients have a very steep learning curve, lack of community support for some and nowhere to go to provide practical support. Years ago we would contact the local college and a student in early years might go to the house as part of their work experience..... sometimes hospital appointments are very unhelpful. One of my clients used to spend a day a week with all of them at the hospital, which was incredibly stressful. There is also problems with advice and guidance from different professionals which contradict or don't work well together. It needs a joined up approach and for the professionals to get organised not wait for the client to start to sink and need to be making joint decisions with family about realistic targets" 3074

Within the final theme 'family experiences', the HVs reiterated the impact of multiple birth on families and many HVs indicated that families with multiple births had increased needs when compared to families with singletons. The HVs identified additional factors that may impact on families' experiences such as increased prevalence of preterm birth, health/developmental concerns and bereavement.

"Having more than 1 of the same age is not like having more than one child of differing ages - it's really hard work for these parents - in all aspects of their lives" 0065

"Prematurity is a common theme, and one sicker baby may remain in hospital whilst the other is discharged. Parents can feel torn in two and the impact of prematurity and prolonged hospitalisation can be traumatising for the parents and babies, and impact on attachment" 6548

"Very difficult situation when one twin survives and one twin does not" 6382

"They really value the extra health visiting support" 7411

Summary of findings

- Most HVs (88%) have twins on their current caseload.
- Most HVs (63%) have not received any specific training to improve their knowledge and skills when working with families with multiples during their initial HV training.
- Only 3% of respondents had attended CPD events about multiples.
- Discussion with colleagues (73%) and professional experience (79%) are the most commonly stated sources of information to support knowledge and skills development for practice supporting multiple birth families.
- Appointments taking double the time was the biggest challenge for HVs (55%).
- HVs qualified for 5 years or less expressed feeling challenged by their lack of knowledge and awareness of third sector support when working with multiple birth Families.
- Daily tasks of caring for multiple birth children such as breast-feeding, weaning and managing crying were the main areas both HVs (50%) and parents (60%) wanted more information about.
- Almost 100% of respondents undertook additional work such as playing with siblings or changing nappies while undertaking home visits of MB families.
- Most HVs provided information about third sector support locally (55%) or nationally (68%) as standard practice.

Discussion

The findings of this study replicate those of an earlier small-scale qualitative study with HVs (Alamad et al, 2018). Insight is provided to the experiences of HVs supporting multiple birth families, the wider challenges and pressures that they face and the implications of the ways in which their workload is currently configured and controlled. It might be assumed that the survey would only attract HVs who already favour and/or have personal experience of multiples. However, some respondents gave responses which indicated that they felt multiple birth families did not have particular or specific needs. It can therefore be assumed that they were no more committed to multiple birth than any other families. In addition, almost half of respondents did not have personal experience of multiple birth.

The study provides evidence of the lack of education and continuing professional development that HVs in the UK receive about multiple births. This should be of concern to policy makers, those responsible for service provision and institutions providing HV education and continuing professional development given the specific impact that multiple births can have on family wellbeing (Bryan 2003; Jenna et al, 2011, El-Toukhy et al, 2018; Scoats et al, 2018). Furthermore, nearly two thirds of HVs did not routinely include content about multiples when teaching student health visitors. The current lack of robust evidence, guidelines and standards for HVs about providing care and support to multiple birth families compounds the problem regarding the lack of HV education. This deficit is most keenly felt by HVs qualified for 5 years or less, who expressed feeling particularly challenged by their lack of knowledge and awareness of third sector support. Consequentially HVs are most likely to base their practice on their previous professional experience and discussion with colleagues.

It is clear that many HVs enjoy working with multiple birth families and are aware of the challenges that multiple birth families face. These HVs do their best to support families within the confines of their role and the availability of ever diminishing resources. In some instances, HVs indicated that they undertook 'hidden' work by carrying out activities that they are not 'allowed' to do, such as bathing or feeding multiple birth infants. The performance of hidden work echoes the findings of the earlier qualitative study (Alamad et al, 2018). Bereavements featured prominently as an area requiring HV support in the exploratory study (Alamad et al. 2018), this was also the case for the survey, with 25% of HVs selecting this as an area they felt

they needed more information about. However, only 6% of respondents reported bereavement as an area parents their need guidance on.

The HVs almost unanimously agreed that the most challenging time-period for multiple birth families is the 0-12 month time-period, which is endorsed by other evidence (Harvey et al, 2014). None of the HVs selected the 49-60 month time-period which is when most families will be preparing their children for transition to school. The evidence suggests that the period of transition to school may also be regarded as a stressful time for families (Huser et al, 2016) and may be even more stressful for multiple birth families as they are faced with decisions about classroom separation (White et al, 2018). These effects are exacerbated where multiples are born prematurely (Blackburn & Harvey, 2018). This lack of recognition by our respondents that this period of transition might present additional stressors for families with multiple births, represents a potential area of unrecognised and unmet need for the health visiting service.

The HVs gave other examples of service provision that does not recognise the needs of multiple birth families, for example systems that do not facilitate booking combined or consecutive clinic appointments for multiple birth children.

The widespread lack of a designated care pathway for multiple birth families suggests that policy makers and those responsible for service provision fail to recognise the specific needs of multiple birth families.

Some HVs were more defensive about their practice with multiple birth families and identified a number of things that they were not 'allowed' to do. Some HVs also reported that the onus was on parents to ask for things, such as contact with other multiple birth families. This could indicate HV caution and sensitivity about not wanting to undermine parents' confidence. It could also illustrate the constraints under which HVs currently work. Alternatively, it could indicate a lack of HV awareness about the needs of multiple birth families or reluctance (for whatever reason) to advocate for them.

In the UK, HVs are uniquely positioned to support multiple birth families (Hamill, 2014; Harvey et al, 2014). However, the findings of this study suggest that many HVs are aware that the

care and support that they are able to provide multiple birth families falls short of meeting their needs.

Study strengths

- ❖ This is the first such study to generate evidence regarding HV experiences supporting multiple birth families in the UK.
- ❖ Data were collected in a direct, unobtrusive and convenient way from HVs based across a wide geographical area.
- ❖ Enabling HVs to recount their experiences provides a context for some of the documented criticism of HVs by multiple birth families. The study provided HVs with the opportunity to clarify their challenges, needs and concerns both about working with multiple birth families and the wider challenges of the HV role.

Study limitations / challenges

- ❖ Although HV responses were received from all four nations of the UK, it is acknowledged that the study findings have a strong bias towards England.
- ❖ Whilst the survey has captured a lower response rate than was anticipated, the sample includes a good representation of differing HV personal and professional experiences.
- ❖ The survey endeavoured to capture information about current HV caseload. However, it became apparent that HV workload is configured differently across the UK and so it was only possible to present rudimentary information about this.

Conclusion

This was the first such study in the UK. This original, scientifically rigorous study provides an evidence base of HV experiences supporting multiples birth families. This is an important area of work as it is widely recognised that parenting multiple birth children can be more complex for parents and babies, which can affect family life and wellbeing. The identification of the current gaps in HV education and professional development about multiples should prompt service, education and continuing professional development providers to address this shortfall. This study also highlights the challenges and pressures that HVs currently face and the lack of recognition in current HV workload configuration and wider service provision of the needs of multiple birth families. Strategies to facilitate HV support for multiple birth families should be explored. This will enable HVs and the service more generally to meet the needs of multiple birth families more effectively, thereby promoting family integrity and wellbeing (Beck, 2002). Given the recently documented decrease in the number of Children's Centres (Smith et al, 2018), ensuring that HVs meet the needs of the families they support is becoming increasingly imperative.

References

Alamad, L. Denton, J. Harvey, M. (2018) Health Visitors' experiences supporting multiple birth families: An exploratory study *Journal of Health Visiting* 6 12 610-620

Beck, C.T. (2002) releasing the pause button. Mothering twins during the first year of life *Qualitative Health Research* 12(5): 593-608

Blackburn, C. Harvey, M. (2018) 'A different kind of normal': parents' experiences of early care and education for young children born prematurely *Early Childhood Development and Care*, DOI: 10.1080/03004430.2018.1471074

Bryan, E. (2003) The impact of multiple preterm births in the family *British Journal of Obstetrics and Gynaecology* 110(s20): 24-28

Department of Health (2019). *Northern Ireland health and social care (HSC) workforce census March 2019* | Department of Health. [online] Health. Available at: <https://www.health-ni.gov.uk/publications/northern-ireland-health-and-social-care-hsc-workforce-census-march-2019> [Accessed 4 Feb. 2020].

Dodd, J.M. Dowswell, T. Crowther, C.A. (2015) Specialised antenatal clinics for women with a multiple pregnancy for improving maternal and fetal outcomes (Review) *Cochrane Database of Systematic Reviews* 2015 Issue 11 Art.No.:CD005300
DOI: 10.1002/14651858.CD005300.pub4

Domato, E. (2005) Parenting multiple infants *Newborn and Infant Nursing Reviews* 5(4): 208-214

Donetto, S. Maben, J. (2014) 'These places are like a godsend': a qualitative analysis of parents' experiences of health visiting outside the home and of children's centres services *Health Expectations* 18(6): 2559-2569

El-Toukhy, T. Bhattacharya, S. Akande, V.A. on behalf of the Royal College of Obstetricians and Gynaecologists (2018) Multiple pregnancies following assisted conception. Scientific Impact Paper no. 22 *British Journal of Obstetrics and Gynaecology* DOI:10.1111/1471-0528.14974

Expert Group on Multiple Births after IVF (2006) *One child at a Time: Reducing multiple births after IVF*

Hamill, C. (2014) Specialist support for parents of twins *Journal of Health Visiting* 2(11): 586-588

Harris, M. and Taylor, G. (2014). *Medical statistics made easy*. Banbury, Uk: Scion.

Harvey, M.E. Athi, R. Denny, E. (2014) Exploratory study on meeting the health and social care needs of mothers with twins *Community Practitioner* 87(2): 28-31

Heinonen, K. (2015a) Methodological and hermeneutic reduction – a study of Finnish multiple-birth families *Nurse Researcher* 22(6): 28-34

Heinonen, K. (2015b) Levels of reduction in van Manen's phenomenological hermeneutic method: an empirical example *Nurse Researcher* 22(5): 20-24

Heinonen, K. (2016) Supporting multiple-birth families at home *International Journal of Caring Sciences* 9(2): 422-431

Huser, C. Dockett, S. Perry, B. (2016) Transition to school: revisiting the bridge metaphor, *European Early Childhood Education Research Journal*, 24:3, 439-449, DOI:10.1080/1350293X.2015.1102414

Jena, A.B. Goldman, D.P. Joyce, G. (2011) Association between the birth of twins and parental divorce *Obstetrics and Gynecology* 117(4): 892-897

Jenkins, D.A. Coker, R. (2010) Coping with triplets: perspectives of parents during the first four years *Health Social Work* 35(3): 169-180

Leonard, I. Denton, J. (2006) Preparation for parenting multiple children *Early Human Development* 82(): 371-378

Montacute, R. Bunn, S. (2016) *Infant Mortality and Stillbirth in the UK, Number 527 May 2016* London: The Parliamentary Office of Science and Technology

NICE (2019) *Twin and triplet pregnancy* London: National Institute for Health and Care Excellence

Nurse, S. Kenner, C. (2011) Multiples in the newborn intensive care unit: parents' and nurses' perspectives *Newborn and Infant Nursing Reviews* 11(4): 175-179

Nursing Times. (2017). Exclusive: Warning drive to boost Scottish health visitor workforce falling behind target. *Nursing Times* [online] Available at: <https://www.nursingtimes.net/news/workforce/warning-over-drive-to-boost-scottish-health-visitor-workforce-20-06-2017/> [Accessed 4 Feb. 2020].

Office for National Statistics (2016) *Birth Characteristics in England and Wales: 2015* <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/bulletins/birthcharacteristicsinenglandandwales/2015>

Office for National Statistics (2017) *Birth Characteristics in England and Wales: 2016* <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/bulletins/birthcharacteristicsinenglandandwales/2016>

Office for National Statistics (2019) *Birth Characteristics in England and Wales: 2017* <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/datasets/birthcharacteristicsinenglandandwales/2017>

Ooki, S. Hiko, K. (2012) Strategy and practice of support for families with multiple births children: Combination of Evidence-based Public Health (EBPH) and Community-Based Participatory Research (CBPR) Approach Public Health *InTech* DOI 10.5772/36112

Ostlund, A. Nordstrom, M. Dykes, F. Flackling, R. (2010) Breastfeeding in preterm and term twins, maternal factors associated with early cessation: a population based study *Journal of Human Lactation* 26(3): 354-358

Redshaw, M. Henderson, J. Kurinczuk, J.J. (2011) *Maternity care for women having a multiple birth* Oxford: National Perinatal Epidemiology Unit

Scoats, R. Denton, J. Harvey M. (2018) One too many? Families with multiple births *Community Practitioner* 91, 10 20-31

Sherwood, B. (2019). *Staff directly employed by the NHS in Wales, at 30 September 2018*. [online] *Welsh Government*. Available at: <https://gov.wales/sites/default/files/statistics-and-research/2019-03/staff-directly-employed-by-the-nhs-30-september-2018-167.pdf> [Accessed 4 Feb. 2020].

Shinwell, E.S. Haklai, T. Eventov-Friedman, S. (2009) Outcomes of multiples *Neonatology* 95(1): 6-14

Smith, G. Sylva, K. Smith, T. Sammons, P. Omonigho, A. (2018) *Stop Start: Survival, Decline or Closure? Children's centres in England 2018* London: The Sutton Trust

White, E.K. Garon-Carrier, G. Tosto, M.G. Malykh, S.B. Li, X. Kiddle, B. Riglin, L. Byrne, B. Dionne, G. Brendgen, M. Vitaro, F. Tremblay, R.E. Boivin, M. Kovas, Y. (2018) Twin classroom dilemma: To study together or separately? *Developmental Psychology* 54 (7): 1244-1254.

Whitford, H.M. Wallis, S.K. Dowswell, T. West, H.M. Renfrew, M.J. (2017) Breastfeeding education and support for women with twins or higher order multiples (Review) *Cochrane Database of Systematic Reviews* 2017 Issue 2 Art.No.:CD012003 DOI: 10.1002/14651858.CD012003.pub2

Wenze, S.J. Battle, C.L. Tezanos, K.M. (2015) Raising multiples: mental health of mothers and fathers in early parenthood *Archives of Women's Mental Health* 18(2): 163-176

Appendix One – Background Elizabeth Bryan Multiple Births Centre

The Elizabeth Bryan Multiple Births Centre (EBMBC) was formed in April 2017 as a collaboration between Birmingham City University (BCU) and the Multiple Births Foundation (MBF). The EBMBC is a pioneering innovation with the aim of extending knowledge and developing the provision of care and support to multiple birth families. The EBMBC is based at BCU. The original co-leads were Merryl Harvey and Jane Denton. Merryl has recently retired and has been replaced by Nathalie Turville as an acting co-lead. Rita Kaur is the administrator for the Centre.

Further information is available from the website: <http://www.bcu.ac.uk/ebmbc>

Appendix Two – Numbers of practising health visitors in the UK

England (2019) n = 8,100 HVs working for NHS England

Source: NHS Digital (2019) *NHS Workforce Statistics - May 2019*. Available at: <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/may-2019>

Scotland (2017) n = 1,357

Source: Merrifield, N. (2017) Warning over drive to boost Scottish health visitor workforce. Available at: <https://www.nursingtimes.net/news/workforce/warning-over-drive-to-boost-scottish-health-visitor-workforce/7018909.article>

Wales (2019) n = 876

Source: Welsh Government (2019) *Staff directly employed by the NHS: 30 September 2018*. Available at: <https://gov.wales/sites/default/files/statistics-and-research/2019-03/staff-directly-employed-by-the-nhs-30-september-2018-167.pdf>

North Ireland (2019) n = 526

Source: Department of Health (2019) *Northern Ireland health and social care (HSC) workforce census March 2019*. Available at: <https://www.health-ni.gov.uk/publications/northern-ireland-health-and-social-care-hsc-workforce-census-march-2019>

Appendix Three – Participant Information Leaflet



BIRMINGHAM CITY
University

Supporting multiple birth families¹; establishing an evidence base to inform health visitor practice

Research team:

Merryl Harvey, Professor of Nursing and Family Health, Birmingham City University / co-lead
Elizabeth Bryan Multiple Births Centre

Jane Denton, Director of Multiple Births Foundation / co-lead Elizabeth Bryan Multiple Births Centre

Cheryll Adams, Executive Director of Institute of Health Visiting

Robert Cook, Research Fellow Medical Statistics, Birmingham City University

Lara Alamad, Research Assistant, Birmingham City University

Introduction

The Elizabeth Bryan Multiple Births Centre (EBMBC) is a collaboration between Birmingham City University (BCU) and the Multiple Births Foundation. One of the aims of the EBMBC is to establish an evidence base on supporting multiple birth families. As part of this work, we are inviting you to participate in a survey of health visitors working in the United Kingdom. This study is a collaboration between the EBMBC and the Institute of Health Visiting (iHV). Before you decide about taking part, it is important that you understand why the study is being done and what it will involve. Please take time to read this information sheet and to decide if you would like to participate. Please let us know if you would like more information about the study (see email address at the end of this document). Thank you for reading this.

What is the study about?

The survey will investigate health visitor experiences supporting multiple birth families. We would like to find out about any education and professional development that health visitors have received and their experiences supporting multiple birth families. This will provide evidence of health visitor experiences, perceptions and education and professional development needs regarding multiple birth families.

Who has funded the study?

The Burdett Trust for Nursing has provided funding for the study.

Why am I being invited to take part?

We wish to recruit health visitors (including practice teachers) who are currently practising in the United Kingdom. You have been given access to this leaflet so that you can think about taking part in the study.

Do I have to take part?

Involvement in this study is entirely voluntary. It is up to you to decide if you want to take part. If you decide not to take part or withdraw from the study, your relationship with the EBMBC, the iHV or BCU will be unaffected.

What will happen if I agree to take part?

We would like you to participate in an online survey. If you would like to participate, you will need to access the link to the survey which is located on the EBMBC website (<http://www.bcu.ac.uk/ebmbc>). The opening questions will ask you to confirm that you have a health visiting qualification and that you are currently practising as a health visitor in the United Kingdom. If you answer 'no' to either of these questions, you will be unable to proceed with the questionnaire. You will then be asked to confirm that you consent to participate in the survey. You will be unable to proceed with the questionnaire until consent has been confirmed. If you decide to take part, you can still withdraw from the study at any time without having to give a reason. Please note however, that it will not be possible to withdraw your data once data analysis has commenced.

The questions are based on the findings of focus groups previously held with health visitors. Questions will ask about your professional qualifications, current role, length of time working as a health visitor, the geographical area in which you work and your experiences working with multiple birth families.

Your name, exact place of work and age will not be required. We anticipate that it will take about 10 minutes to complete the questionnaire. You will not incur any costs or be paid any money to take part in the study. However, you can if you wish participate in a prize draw for a £30.00 shopping voucher (see below).

What are the possible risks of taking part?

We do not anticipate that the survey questions will cause you to feel distressed. However, if you find answering some of the questions upsetting you may wish to discuss this with your team leader / manager.

What are the possible benefits of taking part?

Whilst there will be no direct benefit to you in taking part, we hope that you will enjoy sharing your experiences. Your participation will also provide evidence to support the future education and professional development of health visitors about multiple births.

What if something goes wrong?

If you feel at any time that you have cause for complaint arising from this study, please let us know. If you wish to make a complaint please contact Julie Quick, Insurance lead, Faculty of Health Education and Life Sciences via: hels_ethics@bcu.ac.uk

Will my involvement in this study be kept confidential?

In accordance with data protection requirements, all study data (pre and post analysis) will be stored on a BCU password protected device. Only the research team will have access to the study data. In accordance with current BCU guidelines, study data will be securely destroyed after five years. No identifiable information (for example names or exact places of work) will be included in any papers or conference presentations. Where appropriate, codes will be used to protect the identity of individuals or places. In order to take part in the prize draw, participants will need to enter their work email address at the end of the questionnaire. These email addresses will be securely stored on a BCU password protected device and will be securely destroyed when the draw has been completed. The email addresses will only be accessible to the research team and will not be used for any other purpose.

What will happen at the end of the study?

A report will be written for the Burdett Trust for Nursing. The findings will also be available on the EBMBC and iHV websites, published in health care journals and presented at conferences. Your personal details and your exact place of work will not be included in any of these.

Who has reviewed this study?

This study has been reviewed and approved by the Faculty Academic Ethics Committee, Faculty of Health, Education and Life sciences, Birmingham City University.

Contact for further information

If after reading this you have any questions or need some further information, please contact:

For further information about the survey:

multiplebirths@bcu.ac.uk

Tel: 0121 331 5185

Link to survey:

<http://www.bcu.ac.uk/ebmbc>

Thank you for taking time to read this leaflet.