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Opinions of UK perinatal health care professionals on home birth

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ABSTRACT

Objective: to evaluate the opinions of UK perinatal health care professionals on home birthing.
Design: cross-sectional survey.
Setting: four hospitals and three Primary Care Trusts in the East of England.
Population: hospital and community midwives, GPs, consultant obstetricians and gynaecologists, consultant paediatricians and neonatologists.
Methods: postal questionnaire between December 2010 and June 2011 using Likert scales (range 0–10) and freetext questions. Data were analysed using the Kruskal–Wallis test and qualitative methods.
Main outcome measures: opinions, support and enthusiasm for home birthing.
Findings: 432/831 (52%) professionals responded: 224/418 (54%) midwives, 148/321 (46%) GPs, 32/52 (62%) obstetricians/gynaecologists and 28/41 (68%) paediatricians/neonatologists. Midwives were more enthusiastic about home birthing than any other professionals (median Likert scale rating: 9 [IQR 8–10], $p < 0.0001$) and more supportive of the UK government's plan to increase home birth rates (median 8.5 [IQR 7–10], $p < 0.0001$). GPs and obstetricians/gynaecologists tended to hold neutral opinions about home birthing (median of GPs 5 [IQR 3–7.5] and of obstetrician/gynaecologists 5 [IQR 2–7]) and regarding support for the government's plan (GP median 5 [IQR 2–6]; obstetrician/gynaecologists median 5 [IQR 2–5]). Paediatricians/neonatologists were generally negative about home birthing (median 4 [IQR 3–5]) and opposed to the government's plan (median 3 [IQR 2–5]).
Conclusions: significant differences of opinion exist between UK perinatal health care professional groups about home birthing. Negative and neutral opinions should be further explored and addressed as they may impact on the uptake of home birth by women.

Introduction

Recent UK governments have prioritised giving women choice over the place of birthing to ensure that pregnancy and birth are as safe and satisfying as possible for both mother and baby (The Labour Party, 2005; Department of Health, 2007; The Conservative Party, 2010). This policy has prevailed despite ongoing debates over the safety of home birth. The joint statement of the Royal College of Obstetricians and Gynaecologists and the Royal College of Midwives (2007) concluded '*there is no reason why home birth should not be offered to women at low risk of complications and it may confer considerable benefits for them and their families*'. In contrast, the American College of Obstetricians and Gynecologists does not endorse home birth, citing a lack of evidence to support its safety (American College of Obstetricians and Gynecologists, 2011). The American Academy of Pediatrics concurs, and concluded its 2013 policy statement by affirming that '*hospitals and birthing centers are the safest settings for birth in the United States*' (American Academy of Pediatrics, 2013). A recent clinical opinion article in the American Journal of Obstetrics and Gynecology concludes that '*Advocacy of planned home birth is a compelling example of what happens when ideology replaces professionally disciplined clinical judgement and policy*' (Chervenak et al., 2013). One North American study by Wax et al. (2010) suggested a three-fold increase in neonatal mortality associated with home birthing. Yet recent studies from Canada (Janssen et al., 2007; Janssen et al.,

Abbreviations: GP, General Practitioner; O&G, Obstetricians and Gynaecologists; P&N, Paediatricians and Neonatologists; MW, Midwives; NHS, National Health Service; IQR, Interquartile Range; CI, Confidence Intervals

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2009) and the Netherlands (De Jonge et al., 2009; Van der Kooy et al., 2011) concluded that home birth is at least as safe as hospital birth in low-risk women. In a UK setting, the Birthplace in England study demonstrated that home birthing was more cost-effective but was associated with an increased rate of perinatal mortality in nulliparous though not multiparous women (Birthplace in England Collaborative Group, 2011; Birthplace in England Collaborative Group, 2012). A Cochrane review published in September 2012 concluded that there was no evidence from randomised controlled trials to preferentially support either hospital or home birth for low risk women (Olsen and Clausen, 2012).

There is no doubt that internationally there is considerable polarisation of opinion as to whether home birthing is safe and should be promoted. Publication of the study of Wax et al. (2010) provoked a flurry of international correspondence highly critical of the findings and of the journal that published it (Davey and Flood, 2011; Gyte et al., 2011; Johnson and Daviss, 2011; Kirby and Frost, 2011; Sandall et al., 2011; Zohar and DeVries, 2011). Home birthing disasters make national headlines and reignite the debate (Adams, 2012; Shears, 2012).

In 2010, the average home birth rate for England and Wales was 2.5% of maternities (Office for National Statistics, 2011). Regional rates ranged widely, from only 1.2% in the North East of England up to 7.6% in one Welsh region; the rate in our own region (East of England) was 3.3% (Office for National Statistics, 2011). There have been no recent national or even regional studies assessing attitudes to home birthing amongst different groups of UK perinatal health care professionals. Yet the support of health care professionals caring for women and babies is likely to be key to the success of government policy drives to increase home birth rates. The only previous UK studies to assess GP and midwifery views on home birth were conducted almost two decades ago (Brown, 1994; Floyd, 1995; Davies et al., 1996), and notably UK hospital consultants were not included. Four previous studies assessing the views of GPs on home birth found them to be equivocal or negative in their opinions (Brown, 1994; Davies et al., 1996; Klein et al., 2009; Vedam et al., 2012). Home birth rates were shown to be higher when the GP was supportive, but GP support was uncommon (Davies et al., 1996).

Our study aim was to conduct a regional cross-sectional survey of UK midwives, GPs, consultant obstetrician/gynaecologists, and consultant paediatrician/neonatologists to examine opinions held on home birthing. Our hypothesis was that there are significant differences in opinion between these different perinatal health care professional groups regarding home births.

Methods

Participants

Eligible participants were practising hospital and community midwives affiliated to the Norfolk and Norwich University Hospitals, Norwich, and Cambridge University Hospital, Cambridge; GPs working in practices affiliated to Norwich Medical School; consultants in obstetrics and gynaecology (O&G), and in paediatrics and neonatology (P&N) at four hospital NHS Trusts in the East of England (Norfolk and Norwich University Hospitals, James Paget University Hospital [Great Yarmouth], Queen Elizabeth Hospital [Kings Lynn], and Cambridge University Hospitals). We asked midwifery participants to indicate whether they were currently working mainly in a hospital or community setting. The lead trusts involved were those of two senior co-authors (AC and PC). The other trusts were selected for their affiliation to the Norwich Medical School.

Questionnaire design and content

No suitable prior validated questionnaire was available, therefore we devised a survey proforma. The initial questionnaire was devised by all study authors, including a senior midwifery manager with extensive experience in both hospital and community midwifery (PS). The final questionnaire version (Appendix S1) was produced after the review and input of other members of the representative professional groups, including a senior GP, a consultant neonatologist, and a senior consultant obstetrician. Reviewers provided written and/or face-to-face feedback, which was incorporated into the final draft.

Examination of the hypothesis necessitated a predominantly quantitative study of a relatively large cross section of the population. The questionnaire was comprised of nine sections: (i) baseline information; (ii) experiences of home birth; (iii) opinions on and enthusiasm for home birth; (iv) evidence base, publications and government policy; (v) emergency obstetric procedures; (vi) pain relief; (vii) women's choice; (viii) informed decisions; and (ix) further comments. The questionnaire responses comprised Likert scale ratings, multiple choice options, and free text comments.

We asked six key questions regarding: (i) enthusiasm for home birth; (ii) whether they would choose home birth as an option for themselves, a family member, or a friend; (iii) how safe they considered home birth to be in four clinical scenarios: a primigravid woman in an uncomplicated pregnancy; a primigravid woman in a complicated pregnancy; a multiparous woman in an uncomplicated pregnancy; and a multiparous woman in a complicated pregnancy; (iv) their views on the state of the current evidence base for safety of home births, and (v) opinions on the importance to women considering a home birth of the following eight factors: family and friends; health professionals; previous experience; support groups; media; research; convenience; safety; (vi) whether they supported the government plan to increase the rate of home births. Answers indicated on Likert scales were scored in a range from 0 to 10, with 0 indicating a negative answer (e.g. completely unenthusiastic about home birthing), 5 being neutral and, 10 indicating a positive answer (e.g. very enthusiastic about home birthing). For the purposes of the questionnaire, a complicated birth was defined as any planned home birth that required hospital transfer or any birth considered to require obstetric input.

Between December 2010 and January 2011 we posted out the questionnaire along with study invite letter, information sheet, and stamped addressed envelope to all eligible prospective participants at their workplace addresses. A duplicate questionnaire was sent to all non-responders between February and June 2011. No incentives were offered for participation.

Data collection and analysis

All responses provided by participants were anonymised. Quantitative data were analysed using StatsDirect v.2.6.2. (URL: http://www.statsdirect.com/). Ordinal data from Likert scales were analysed using the the Kruskal–Wallis test. The p-value for the comparison of all groups indicates that at least one group has different Likert scale scores. Where appropriate, pairwise comparisons between groups were made using a multiple comparisons procedure. Spearman's rank correlation was used to assess correlations between ordinal or continuous variables. A p-value < 0.05 was considered statistically significant. Qualitative data were analysed via an *a priori* framework using thematic analysis and an inductive approach. A single author (AM) conducted this analysis manually. It involved five separate steps: (i) reading and re-reading data to ensure familiarity with content, (ii) review and manual colour coding, (iii) combining similar codes into