

ARTICLE

Exploring changes in health visitors knowledge, confidence and decision-making for women with perinatal mental health difficulties following a brief training package

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Abstract

Rationale and objective: Perinatal Mental Health (PMH) is an issue that spans the spectrum of pregnancy and childbirth and is now acknowledged to be significant on a global level. Health visitors (HVs) are increasingly expected to extend their knowledge and to understand and identify PMH in the antenatal period and across the spectrum from mild/moderate to severe. While training has been shown to enable HVs to identify post-natal depression (PND) effectively and reduce the proportion of women at risk, the mechanisms underpinning this success are unclear. This paper reports on the findings of a mixed methods study aimed at examining the impact of a single half day training session on perinatal mental health problems (PMHP) on HVs knowledge, confidence and empowerment in relation to managing PMH.

Methods: Findings from data gathered by Likert Scales and focus group discussions are presented.

Results: Training can empower HVs to identify PMHP beyond PND and plays a vital role in promoting confidence.

Conclusions: This research highlights the potential that training of this type has on service provision and delivery. In a resource-limited service, the feasibility of a brief training package has demonstrated positive results for health visitors, childbearing women and their families.

Keywords

Childbirth, decision-making, health visitors, perinatal mental health, person-centered healthcare, person-centered mental health, post-natal depression, training package

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Introduction

Perinatal Mental Health (PMH) as an issue that spans the spectrum of pregnancy and childbirth and is now acknowledged to be significant on a global level. In high-income countries, 10% of pregnant women and 13% of mothers of infants have significant mental health problems, depression and anxiety being the most common [1]. Rates are much higher in resource-constrained countries [1].

Depressive illness associated with childbirth is known to have a profound impact on the infant and the developing child [2,3]. Timely and effective treatment is a major public health concern. Much of the focus within the

literature on maternal depression in childbirth is on postnatal depression (PND) and more latterly antenatal depression (AND); however, there are a number of other psychological/psychiatric disorders that constitute a spectrum of perinatal mental illness (PMI) with which women may present during pregnancy and also postnatally. These include generalised anxiety disorder, panic disorder, post-traumatic stress disorder (PTSD), phobias, obsessive compulsive disorder and adjustment disorders as well as the more severe conditions such as manic depressive disorder, puerperal psychosis and schizophrenia. Healthcare practitioners caring for pregnant and postnatal women are therefore challenged with identifying both those women who present with a pre-existing mental

illness and those for whom childbearing results in some level of perinatal mental illness (PMI).

Training has been shown to enable Health Visitors (HVs) to identify PND effectively and reduce the proportion of women at risk although the mechanisms that underpin this success are not clear. The components of training which are most effective [4] and although it is assumed that training increases knowledge, it is less clear which elements of knowledge acquisition are most useful. This seems particularly pertinent now that HVs are being asked to extend their knowledge to understand and identify perinatal mental health problems (PMHP) in the antenatal period and across the spectrum from mild/moderate to severe. In order to provide effective and person-centered care, HVs need to feel empowered to reassert and expand their role in relation to supporting and improving outcomes for women with PMHP.

Methods

Design

This paper explores the changes in HVs knowledge, confidence and decision-making for women with PMHP following a brief training package. Both quantitative and qualitative findings are presented, comprising part of a larger scale mixed method study, with a pre- post-test embedded design [5]. This paper reports on the findings from data gathered by Likert Scales (LS) and facilitated focus group discussions (FGDs). In coordinating these elements, the results from the LS, combined with interrogation of the FGD data, facilitates a more rounded informed understanding of the impact of training on a cohort of HVs.

Participants

A cohort of 72 HVs and student HVs, predominantly female, attended the training. Age ranged from 20 to 60 years. The length of time since qualification ranged from 1 to > 20 years, the sample being taken from 2 localities. No previous PMH training was reported by 7.6% of the cohort, 57.5% reported previous training, with the nature and source of the previous training being varied and 29.3% reported further training through study days, with pre-registration training featuring as the second highest PMH training type (16%). Combined pre-registration/study day training was reported in 13% of the cohort and 12% undertook and completed a specialist academic module in PMH.

Procedure

The participants attended a training session provided by a Specialist PMH Team. Likert scales (LS) were used to determine the impact of the training on practitioner knowledge and confidence and were administered before and after the training. A follow-up questionnaire was distributed at 8 weeks to determine the enduring impact of training. The qualitative component of the study involved

the collection of data 2 weeks pre- and 8 weeks post-training, through FGDs.

All HVs were provided with an information leaflet about the overall study at the time of booking onto the training. Volunteers were invited to take part in the FGDs through the booking process. Signed consent was obtained from all HVs who participated in the FGDs. Data collection took place at a University in the North of England, UK. Ethical approval was obtained from the University Faculty Ethics Committee and permission to undertake the research was granted by the Research and Development Trust headquarters of the participating Trusts. All aspects of the research were conducted in accordance with the requirements of the Research Governance Framework.

Training Session

This was delivered using a combination of methods, including case studies and vignettes, a recognised method of enhancing learning. The facilitators used a wealth of real life examples to contextualise the session and discussion was encouraged. The session focused upon the causes, symptoms, detection, treatment, impact, prevalence and management of PMHP. Information about PMHP from baby blues to chronic severe mental illnesses was provided. Included in the session were details of how HVs could manage individual cases, when to refer and common questions and concerns. Three training sessions were provided to ensure all HVs had an opportunity to attend and consistency was assured by standardisation of the materials used and the facilitators across sessions were a Consultant Psychiatrist in PMH and a Senior PMH nurse.

Data Collection: Quantitative

Six questions using LS were used to assess 3 key areas in relation to anxiety and depression (A and D) and severe PMHP. The 3 Key areas were self-rated knowledge, confidence in ability to identify and confidence in ability to manage. As a potential confounder, information about age, years of experience and the extent of training received relating to A and D and severe PMHP prior to registration or additional post-qualification training was collected. While the utility of LS in this context is relatively unknown, the LS has been shown to be an instrument of good validity and reliability [6].

Data Collection: Qualitative

FGDs facilitate an illuminative, evaluative process and are often used in healthcare research to explore complex issues [7]. Their utility in this study was in a collective context, which enabled the complex interaction between knowledge acquisition, illness beliefs, practitioner confidence and effective clinical decision-making to be interrogated. Each FGD consisted of an ideal group size of 4 participants [8]. The FGD participants ranged from 38-55 in age, with years of experience ranging from 2 to 15 years. None of the participants had undertaken a specialist PMH module. A semi-structured interview schedule [9] was used to guide the discussions and questions were guided by the aims of the study and were reviewed by practitioners prior to use.

Qualitative data were audio-recorded and transcribed by a member of the research team.

Data analysis: Quantitative

The impact of the training on confidence to apply knowledge to the identification and management of severe PMHP was evaluated. Paired t-tests were applied to the changes in the knowledge and confidence scores, pre- and post-training. The covariates Age, Years of Experience and Completion of a Specialist Module were then included in a general linear model with the change in score over time as the dependent variable for each score. Initially, each variable was included on its own and then all 3 variables were included jointly in the statistical model. The Age (categories: 20-39 years old, 40- 49 and over 50) and Years of Experience (categories: less than 1 year, 1-5 years, 6-10 years, 11-15 years, 16-20 years and over 20 years) variables were analysed as interval level covariates. This analysis of the subjective self-rated measures aimed to give some additional insight into the effect of the covariates by taking account of the ordering and giving additional statistical power. Bootstrapped p-values were calculated in view of the discreteness and possible consequent non-normality of the LS scales.

Data analysis: Qualitative

Trustworthiness of the study was promoted by carefully monitoring the research process. Data were analysed using an inductive thematic analysis [10]. Transcripts were read and re-read by 2 researchers (JJ, CJ), to identify significant comments and emergent themes and later refined with the research team. Credibility is one of most important factors in establishing trustworthiness [11]. The emergent themes were discussed and compared with the findings from a previous research study which employed the same methodology on a cohort of midwives to address credibility [12].

Results

Quantitative

Data from the LS revealed that all HVs rated themselves as having increased scores on all aspects of A and D and severe PMHP; that is, self-rated knowledge of A and D and severe PMHP, confidence in ability to identify A and D and severe PMHP and confidence in ability to manage A and D and severe PMHP (bootstrapped $p = 0.001$ in all cases). This illustrates the significant (perceived) impact of training on all key areas. (See Table 1).

When the variable Completion of a Specialist Module was included on its own, the results in Table 2 were obtained. (See Table 2).

When Length of Experience was run as the sole predictor, the parameter estimates were all negative, apart from that for identification of severe PMHP which was statistically significant ($B = -0.348$, $se = 0.130$, $t = -2.675$, $p = 0.013$). This indicates that less experienced HVs had a greater increase in their confidence to identify severe

PMHP following training. Age was analysed by itself and no significant differences were found on any of the variables.

The general linear models containing all 3 predictor variables¹ gave the following statistically significant results. The change in self-rated knowledge of A and D ($p = 0.021$) and change in confidence to manage A and D ($p = 0.038$) and severe PMHP ($p = 0.029$) was greater for those who had not already completed a specialist academic module. Less experienced HVs reported greater improvement in confidence to manage A and D ($p = 0.038$), change in knowledge of severe PMHP ($p = 0.027$) and changes in confidence to identify ($p = 0.002$) and manage severe PMHP ($p = 0.020$).

Qualitative: Pre-training FGD

Participants in the pre-training FGD commonly experienced challenges when managing the care of women with PMHP. HVs narratives have been used to illustrate their experiences of working with women with PMHP prior to attendance at the training day.

Lack of training and preparation

There was evidence that the contemporary remit of PMH has become much broader than that of depression, leaving some HVs feeling unprepared for the extent and complexity of PMH:

“Training pre-registration kind of equipped me to deal with the mental health system, but unless you’ve got mental health experience, y’know outside your training, I don’t really feel that, unless you came across it within your training, that would help a bit, but if you didn’t, you never got the real, the real sort of in depth training that you would need” (HV 2).

For those who did recognise the broadening remit, this was identified as challenging, as well as the associated expectation to potentially provide interventions to support women with a range of PMHP:

“You don’t get training specifically around, well I don’t, I mean it’s within our training but not specifically on post-natal depression and like you I haven’t, I’m not a counsellor, never done a counselling course, my job as far as I can see for the first so many years is literally just to go and listen and try to just offer some support” (HV 4).

Referral processes

HVs perceptions were that referral processes for women with PMHP were problematic; services seemed to fall short of what some women required, lack of communication/integration between services was a lucid problem:

“Although they’ve seen somebody and spoken to somebody, maybe that wasn’t what they needed to help them cope with what they were experiencing” (HV 1).

¹ The predictor variables were Completion of a Specialist Module, Length of Experience and Age.

Table 1 Impact of training on all key areas

	Pre-Mean (SD)	Post-Mean (SD)	t	P value [Bootstrapped]
Knowledge of A and D	6.19 (1.83)	8.40 (1.15)	10.8	0.001
Identification of A and D	7.03 (1.74)	8.58 (1.18)	7.97	0.001
Management of A and D	6.49 (1.64)	8.37 (1.28)	10.8	0.001
Knowledge of severe PMHP	5.60 (1.73)	8.10 (1.17)	13.3	0.001
Identification of severe PMHP	6.19 (2.04)	8.30 (1.21)	10.3	0.001
Management of severe PMHP	5.41 (1.95)	8.03 (1.32)	11.3	0.001

Table 2 Pre- and post-means by Completion of a Specialist Module

	Not completed		Completed	
	Pre-Mean (SD)	Post-Mean (SD)	Pre-Mean (SD)	Post-Mean (SD)
Knowledge of A and D	6.07 (1.90)	8.39 (1.11)	6.77 (1.36)	8.46 (0.877)
Identification of A and D	6.95 (1.83)	8.58 (1.21)	7.38 (1.19)	8.62 (1.26)
Management of A and D	6.41 (1.70)	8.41 (1.29)	6.85 (1.35)	8.15 (1.28)
Knowledge of severe PMHP	5.55 (1.78)	8.10 (1.14)	5.83 (1.53)	8.08 (1.38)
Identification of severe PMHP	6.16 (2.19)	8.31 (1.25)	6.33 (1.07)	8.23 (1.09)
Management of severe PMHP	5.33 (2.05)	8.05 (1.40)	5.83 (1.40)	7.92 (0.954)

HVs discussed how they adapted their practice, or took a specific approach to managing PMHP, in order to compensate for their lack of confidence in the referral process:

“There have been ladies that, y’know you’re supposed to offer 6 listening visits, but there have been ladies that I’ve supported for years, erm and tried to sort of wean them off as the process has gone along” (HV4).

Services not tailored to women’s needs

Whilst there was a recognition of agencies to support women, the data suggest that women and HVs are affected and potentially compromised by the perceived or real limitations of the current provision:

“I have a lot of mums who are at that point where they just can’t access the voluntary sector, they just don’t feel like they can go to a group and I know they offer one to one visits or referrals and things, ... they’re not ready, they’ve told you and that might be a massive leap forward for them to even divulge how they are feeling” (HV 1).

“Then of course there was the CPN but there was always a gap between GP, health visitor and then CPN, that was certainly my experience ... [refers to a previous experience] ... they did one assessment and felt that it wasn’t severe enough to warrant their input, but for me it was a bit more than I could help with, and there was nowhere to go really” (HV 4).

HVs appear to be trying to compensate for perceived service limitations; however, they are also aware that their

ability to offer support in the absence of an appropriate service is also limited:

“It’s the ones in the middle that don’t really want the medication ... and just need that little bit extra but aren’t severe enough to go onto the other therapies. It’s those that sort of fall in the middle really, and could really do with support by HVs that would be perfect” (HV4).

“So then they don’t feel like they can access any other group support out there, so it’s sort of left sitting in your lap and then that’s when I start to feel, have I got the confidence to deal with this” (HV1).

Changes

An overall image of a changing landscape was evident from the data and appeared to impact negatively upon the HV role, presenting challenges in detecting and managing PMHP and changes to the way service is provided, alongside changes in the individual circumstances of the women they provide care for and the conditions women present with:

“The added problem, sorry, where we’re working is that a lot of our families don’t, our ladies don’t, our mums don’t speak English, so we’ve got an interpreter which is really difficult” (HV 3).

Qualitative: Post-training FGD

The positive impact of the training on self-reported confidence to apply increased knowledge to identification and management was evident. The perceived value of the training to HVs practice is exemplified in the post-training accounts:

Practitioner growth through increased knowledge

The data suggest that HVs do accrue new knowledge through the training about PMH in a broader sense:

“It [training] sort of empowered me to think no actually, you, you do sort of know, it gave me confidence to think, stop thinking that you’re not seeing the right signs and you’re not dealing with it appropriately” (HV 2).

There is also a suggestion that training ‘unlocks’ and contextualises existing knowledge. Associated with that growth in knowledge, comes increased confidence, self-efficacy and professional satisfaction:

“I feel more comfortable, more confident, actually I think when I first came and we had the focus group interview I was saying about, with being fairly newly qualified and not having the confidence to deal with women but actually what the training taught me was I’m not saying I’m a counsellor at all cos I’m not but actually I thought I did have more knowledge than I actually gave myself credit for” (HV 2).

“Well it made me confident about some of the issues that I felt, I knew some of them, and that contributed to the confidence overall I think” (HV 3).

New perspectives of PMH

HVs reported an emergence of new perspectives of PMH after the training. For all HVs, it was apparent that the management of women became easier due to awareness, accessibility and subsequent increased use of services, for referrals and for advice:

“I refer many more women; I just tend to refer a lot more ... it wasn’t until I did the training and, afterwards when we’ve come and did the focus group that we discussed it more and I thought, actually yeah, maybe I do need to be speaking to them (MH services)” (HV2).

Recognition of the value of complementary support

HVs acknowledged the value of other agencies pre- and post-training. Their contribution was seen more as complementary and as more integrated than before. Post-training, their views of the best approach for managing women seemed to be more focused on working alongside, rather than handing over to, other services:

“Obviously it’s your confidence and speaking to Single Point of Access, and they’re confirming it, so you think actually yeah I do know, and also, so when you discuss things in a team with your team members, and you say I’ve just been to see this lady and they say yes, yeah that sounds right I agree with you, so that it’s sort of like, they are the facilitators to make you think, yeah you’re doing the right things, yeah” (HV 3).

Enabling/promoting self-care

The collaborative approach appears to extend into HVs acknowledging the strengths of greater collaboration with

women. The post-training data suggest HVs facilitate a more relaxed relationship with women in a number of ways; firstly, through feeling more confident to manage cases and secondly by being less anxious about probing further:

“It has certainly altered my, the way I do things I think as well, it’s a bit more probing the questions, rather than just accepting what they say” (HV 3).

“You do you become, you feel ... it is confidence, I think THAT’S the facilitator, it’s that you know you can do this” (HV 1).

Encouraging reciprocal caring

The post-training data reflect an increased acknowledgement of the benefits of encouraging women to support each other. The acknowledgement and appreciation of a peer support approach to wellbeing did not emerge in the pre-training data:

“She’s admitted she’s got depression, she’s joined a group, she’s done her own Facebook group, and she’s speaking to other young mums who are their age so they are feeling the same way and it’s so positive and I think that was obviously a help, that was a connection [referring to the training], I was so impressed with this, she’d done it all herself” (HV2).

Discussion

The results of this study highlight the impact of training on the development of HV knowledge in relation to a broader understanding of PMHP. It should be noted that training took part across 2 localities where much service development work has been undertaken with regards to PMH and therefore the results may not be generalisable to those areas with less provision. However, the data suggest that training supported HVs to move from unconfident to confident in their management of PMHP, as well as facilitating a sense of empowerment. Pre-training data are suggestive of some existing knowledge and experience of having to manage women with PMHP, but generally in an unsure and often reluctant manner. The post-training data suggests HVs have confidence to employ the knowledge gained through training and while it is clear from the data that the training does provide new knowledge, there is also a sense of HVs contextualising and utilising more effectively what existing knowledge they have. This is important given that previous studies have demonstrated that while practitioners may have knowledge, it is often not appropriately organised and contextualised and hence not used to underpin effective clinical decision-making [13]. Gaining greater insights into the differing level of difficulties PMHP create for women and being able to determine what is appropriate support, underpins more effective decisions about appropriate management and care planning. Thus, the increased understanding promotes a willingness and confidence to identify women with PMHP and to intervene.

Within the quantitative data, the covariates of 'Completing a Specialist Module' and 'Length of Experience,' are interesting. The training brought about the greatest change in the management of A and D and the management of severe PMH in the group of practitioners who had less experience and those who had not completed a specialist module since registration. This finding suggests that training such as this has a significant impact on the ability to manage PMHP for those individuals who have had less theoretical and practical exposure. This finding is not unexpected. Furthermore, practitioners who reported having less experience had a significant change in their knowledge of and their confidence to identify, severe PMHP. However, knowledge of and confidence to identify A and D was not affected to the same extent. This suggests that these practitioners already felt knowledgeable and confident about identifying A and D. One reason for this could be that these practitioners have had more exposure to A and D than severe PMHP and this exposure facilitates a greater understanding and increased confidence in identification. Alongside this, the management of severe PMHP occurs beyond the remit of a HV and therefore, before engaging with the training, these practitioners will have had some involvement in identification but very little in the management of women with severe PMHP. Finally, less experience is suggestive of more recent exposure to HV training and therefore more recent exposure to the theory of A and D and severe PMHP (within the HV curriculum) as opposed to the practical management of these conditions. Hence, the greatest improvement for HVs was that of their confidence to manage both A and D and severe PMHP.

Data in the FG came from a relatively small number of HVs. However, the findings were useful and consistent across the 2 groups. The qualitative pre-training data reflect a clear sense of perceived powerlessness in relation to helping women in terms of initial identification, but also a perceived lack of options for referral. HVs were responsible for women without adequate knowledge and skills. Aspects such as referring into appropriate services, alongside their dependency on women being accepted into those services, impacted upon their pre-training confidence to deal with PMHP. These data illustrate the positive impact of training in terms of a greater understanding of the referral options and systems. This increases HVs sense of confidence and control and facilitates both identification and management. Fundamental aspects appear to be awareness not only of the existence but also the accessibility of effective services to support women with PMHP and this appears to empower HVs to identify women with PMHP. HVs explain how this provides a care pathway for women and seems to reduce the likelihood of HVs having the thought "Oh quick, get out of the house" (HV 2) when faced with women with PMHP. Previously, a real or perceived lack of provision led to HVs being frightened to uncover a problem which may then engender a subsequent responsibility for its management for which they felt unqualified.

Post-training, HVs identify that they utilise the support systems around them with much less hesitation. Awareness of accessible services, highlighted during the training, puts

a face to the professional team and makes them much more approachable and recognised as able to support HVs in their work. They provide a point of advice and reassurance about HVs management decisions, but also a 'back up' which promotes confidence to manage women with PMHP. Training appears to move HVs away from a dichotomous view of mental health problems; that is, refer or not, with a view that there is nothing in between. Training enabled HVs to identify what was happening, consider more relevant options, communicate appropriately with other relevant healthcare professionals and agencies, provide support where appropriate, or identify other forms of support.

Previous research has demonstrated that training can impact on the identification of PND and highlights training as integral to practitioner confidence in dealing with depression [4,14]. This study illustrates that training can empower HVs to identify PMHP beyond PND and plays a vital role in promoting confidence. Further, the data highlight an association between HVs feeling empowered and their role in empowering women to take a degree of personal control of their wellbeing. Confidence in their own practice transfers across into encouraging confidence in women. One HV reported that she felt confident to promote self-care to women post-training, a sentiment which was echoed by others. It is noteworthy that HVs would like to be able to spend more time promoting self-management.

Conclusions

The findings of this study clearly illustrate what a brief training package can achieve. It facilitates not only improved knowledge, but also the ability to apply that knowledge to clinical identification and decision-making, referral decisions and care pathways, resulting in far more person-centered care. What is important is that the lack of confidence pre-training to identify and manage women with PMHP appears inherently linked to a perceived lack of availability and access to any specialised PMH services, which potentially underpins a fear to identify a problem. It also leads HVs to avoid exploring possible routes to care as the perception that there is a lack of support renders any such exploration redundant. HVs in this study discovered that the services which are available could offer more than they expected. This is of particular relevance when current guidelines give practitioners working with childbearing women a defined remit and responsibility to predict and detect PMHP [15].

The provision of specialist services to support women with PMH is patchy both nationally and internationally. United Kingdom (UK) data identify varying degrees and models of service provision [16]. Indeed, currently less than 15% of localities provide services at the full level recommended in national guidance and more than 40% provide no service at all [17]. While it is recognised that competing priorities and resource distribution is an ever present challenge, in order to ensure ethical implementation of NICE guidance and effective person-

centered provision for vulnerable women, service providers need to consider how referral pathways can be developed and co-ordinated from within available resources.

Available referral options and identified referral pathways, when combined with training, to increase and appropriately contextualise knowledge, clearly empowers HVs. Interestingly, however, it also facilitates the consideration of PMHP in a more multifactorial way, which may lead to fewer inappropriate referrals into formal services. Elaboration of HVs understanding enabled them to move beyond a medical model of diagnosis, referral and treatment, to an approach which appears more akin to formulation, that is making sense of the various issues and contributory factors relating to women's difficulties and intervening to help those in need. This empowers HVs to have confidence in their own skills to support and manage women, but also to draw on community and other resources, including women's own ability to support each other. Part of service provision may be to facilitate HVs to discuss cases in a team in order to obtain advice, rather than just referring or not referring. This could be incorporated into training events, or provided to HVs as a regular opportunity. HVs should be made aware that they can obtain support with dealing with women they have concerns about.

One of our objectives was to explore a sustained impact of training on knowledge and confidence through administering the questionnaire at 8 weeks post-training, but low return rates did not facilitate further analysis. Further work is still required to establish whether changes following training are sustained, including work that explores ongoing provision of knowledge and skills support. Clinical supervision may offer one solution [18]. Finally, the data demonstrate that a relatively brief and low cost training package can empower a large workforce to improve and develop their own practice, but also use specialist services more effectively. Given reports of the economic burden of PMH and the associated call for national training packages [16], initiatives currently in development could be informed by the findings of this study.

Conflicts of Interest

The authors declare no conflicts of interest.

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