

Abstract

Aim: A discussion of the use of diaries as an aide memoire for women participants in a study that explored the quality of maternity care through women's views and experiences of the care they received at Scottish Community Maternity Units.

Background: Diaries are traditionally used as contemporaneous data gathering tools, frequently in combination with interviews. This article reviews diary use in longitudinal studies and describes how diaries were used by the study participants as a personal record to enhance interview recall, but not collected for analysis.

Design: A qualitative longitudinal study using semi-structured interviews informed by private aide memoire diaries at key stages in the women's maternity journey.

Findings: The diaries were used by the women to enhance recall and reflection of sensitive mental health issues and the complex decision making process of where to give birth during their interviews.

Conclusion: The use of 'aide memoire' diaries was an effective way of enhancing the quality of data collected during interviews seeking an understanding of the participants' experiences of care over time. This form of diary use would be useful for longitudinal research in different contexts with additional applications for patients experiencing long-term care and associated personal decision making as an 'aide-memoire' of their experiences throughout their care.

Key Words: diary; longitudinal; qualitative; interview and maternity care experiences.

Private memoirs: the use of aide memoire diaries in longitudinal qualitative research.

Introduction

This paper discusses the use of diaries in longitudinal research, and their use in a study which aimed to explore the provision of safe, effective and person-centred care in two midwife-led rural Scottish Community Maternity Units, hereafter referred to as the CMU study. The paper does not seek to describe the study, it focuses on the innovative use of diaries in the CMU study. The purpose of the 'aide memoire' study diaries were for the women to record their experiences of care and decision-making so that they could be used as an aid or prompt during interviews. This article explores the literature on the use of diaries in longitudinal qualitative research. It then offers a description and critique of the specific use of aide memoir diaries made in the CMU study.

Background

The CMU study used a longitudinal design where three data collection points occurred over a time period of twelve months. The particular strength of longitudinal designs lies in their potential to examine changes in people's lives during the period of study (Bryman 2012). This long view facilitates the capture of an evolving experience, allowing the discovery of difference in expectations, experiences and decision-making over time (Kenton 2010; Gerrish and Lacey 2010). Longitudinal studies can be particularly relevant in midwifery research, for example Schmied et al.'s (2013) description of the factors which impact on maternal mental health in the perinatal period and their effect on women's subsequent health five years later. Schmied et al. (2013) found, from the review of eight longitudinal studies, that the predictors for long term mental health issues can be exacerbated by pregnancy and birth. They were able to demonstrate through longitudinal studies that the role of the midwife in the identification, support and appropriate referral of women was an intervention that had long-term benefits. It would not have been possible to arrive at these conclusions without the collection of data over time through the longitudinal design.

Diary Use in Longitudinal Research

There are a number of challenges associated with conducting longitudinal research. These include: the commitment required by participants to repeated data collection episodes over time; the need to capture contemporaneous data throughout the length of the study and

participant fatigue with associated drop out rates (Parahoo 2006). The use of diaries by the participants during the data collection period may help to help address these.

The main advantages of collecting written information in a diary format are that diaries enable the participant to record data in privacy at a time and place of their own choosing, avoiding the inconvenience associated with multiple scheduled contacts with the researcher (Powell 2012). Accounts written in diaries by participants to record their views and experiences in their own words of everyday events (Vebrugge 1980, Valimaki et al.2007), capture data with the clarity afforded by its proximity to the present. Eidse and Turner (2014) further found that the ability to reflect on particular experiences in their own time allowed participants to develop a deeper, more nuanced understanding of events and their associated emotions over time. The emotions and experiences of lesbian mothers were effectively captured by Hayman et al. (2012) by using secure online journals for a group of women who responded to feeling safe in the knowledge that their reflective entries remained private.

Diaries are often used in an attempt to record otherwise elusive influences on decision-making, allowing access to fleeting and ever changing experiences and thoughts that may be lost or forgotten at later data collection points (Barbour 2008). The use of a diary to collect longitudinal data can add a useful dimension or value to interview-based methods, particularly for generating questions at interview (Elliot 1997, Alasewski 2006, Kenton 2010, Way 2011). Using a diary alone,

however, can exclude those participants unwilling or unable to articulate their feelings in a written format (Hinsliff-Smith and Spencer 2016).

The Aide Memoire Diary

The CMU study sought to explore the women's developing views and everyday experiences during their maternity care. The participants were each given an 'aide memoire' diary and interviewed at key stages in their pregnancies as part of a case study approach.

The intended use of the diary for the CMU study was to help the participants to remember their experiences so that they could give contextually detailed data during their interviews. The diary was presented in an A3 ringbinder format. Suggestions were made on the first page that participants may wish to write about any thoughts or experiences during their maternity journey that they felt were important. Clarity was given that the diary was theirs to keep at all times and would not be read by any professional caring for them or the researcher unless they chose to show any, or all of it, to them (see Box 1). Pockets were also available in the diary for women to store any scan pictures, photographs or information they particularly wished to keep. Each double page in the A3 diary was numbered by two weeks in pregnancy, a double page to write about their labour and birth and several pages for after the birth. Spare pages were also included within the diary ringbinder to add as required.

Unusually for diary studies (Bryman 2012, Bowling 2014), the participants were not asked to hand in the diary at any time for

analysis. The diary was also retained by the participants on completion of the study as a permanent memoir of their maternity journeys. The advantage of giving the control of the information within the diary was to allow a freedom of expression facilitated by the knowledge that the diary would not be judged, analysed or even seen (unless they wished) by a third party. Diaries used in qualitative research studies are normally collected from the participants and the contents analysed as a discreet data source (Nicoll 2010, Way 2011) often alongside interviews which occur separately. The aim was to provide a platform, in this case a paper diary, in which to record important aspects of participants' experiences during their maternity journey entirely for their own use which they could use to aid recall during interviews. The eight women whose interviews were informed by aide memoir diaries yielded very detailed data about individual women's perceptions of the care they received. Four women had not used their aide memoir diaries when asked during their interviews, and were less able to make reference to specific incidences and experiences which contributed to their opinions on the maternity care they received.

Recruitment

Women who were aged over 16 years, accessing care at the participating CMUs and able to read and speak English fluently, were informed of the study at their first antenatal appointment by a short introductory letter. Those who expressed an interest were introduced to the researcher who explained the purpose of the research, and what

participation would involve. Consent, confidentiality and anonymity were discussed and written information was provided.

Sample Size

A purposive sample of forty women with a wide spectrum of maternity care needs were invited and twenty four women consented to participate in the study. The sample size was chosen in view of the scope and focus of the study, the anticipated quality of the data obtained and the resources available (Morse 2000).

Ethical Considerations

The study received ethical approval from the local NHS Research Ethics Services, Scottish Multi-Centre Research Ethics Services and the University Ethics Committee. Appropriate site access management permission was obtained. Pseudonyms have been used to protect the anonymity and achieve confidentiality for the participants.

Study Conduct for Aide-Memoire Diary Use

The diary was given to all participants, on completion of their early pregnancy interview. They were invited to write in their diaries regularly and have them available to refer to during their late pregnancy and post birth interviews. At the start of each interview, the women were asked whether they wished to use their diaries to help them to remember their experiences of care. The question often led to the response that the women had enjoyed using their diaries to write about and record what they felt were important aspects of their care, to retain clear memories as their pregnancies progressed.

" I thought it was great fun, I've never been one for keeping a diary, but this is different. It's all about you."

Carly, Interview 2.

The diaries proved popular and became an incentive for women to participate in the early stages of the study. The midwives at the CMUs also positively endorsed the study. Despite careful explanations of the long term commitment required, only eight women continued to refer to their diaries at their final post birth interview. This decrease in continuing to keep a diary is commonly reported (Begley 2002; Thomas 2015), particularly in view of the 12 month timescale between the first and last interviews (Vebrugge 1980).

Hayman et al. (2012) suggested several strategies to promote engagement with the use of diaries, which were used including regular contact and emphasis on the privacy of the diary. The researcher remained in regular contact with the women by way of a regular presence at the CMUs, text messages to remind women of their next scheduled interviews if the researcher had not seen them in person, and by correspondence with Christmas and birth congratulations cards, reminding them about how and when to use their diary.

Aide Memoire Diary Use Findings

As the diaries were not collected or analysed, the findings presented are from the interview transcripts.

Seven women regularly offered their diaries at their interviews to be read, one woman referred to passages she had written in her diary but

did not feel the need to show her diary to the researcher. The natural conversation arising from discussing the diaries led to the collection of more explanatory data at the interview. An example of the benefit of referring to the diary came particularly from one participant, who found that her choice for obstetrician led care had led to care that became increasingly disjointed. She particularly wanted to show the researcher her diary entries, to explain how this lack of continuity in her care had made her feel and how she had used the diary to help evidence that.

Researcher: "I see you noted in your diary that, when you were discussing options...."

Participant: "It's actually quite a good way of, because I thought I sound like a moan complaining, but the diary can't reply [...] but its been a different doctor every time, they've all got different opinions, it depends on who you see, and how that person's going to be with you, which I find quite difficult."

Fiona, Interview 3.

Giving the women control in how the diary was used was helpful to the study in several ways by providing cues for interview questions that may not have been revealed had the aide memoire diaries not been used. One woman had experienced antenatal depression and was able to reflectively discuss in detail her thoughts, feelings and experiences in relation to her specific care needs.

Researcher: "Did you write anything in your diary about that?"

Participant: "Yes, I've written quite a lot in my diary [...] it's really helped writing everything down and looking back on, yes when I feel better, looking back on why I felt so bad that days. Every second or third day I was writing anything, just to write it out and then look back and see that was a really bad day. Then the next day was better. I was a wee bit scared to start with because I thought will they think that I'm not looking after him properly... but it's lovely to keep."

Kate Interview 2.

Kate used her diary entries to clearly recall a deeply personal experience, which she had no intention of allowing anyone else to see. Her aide memoire diary helped Kate to privately remember her changing feelings in detail with great clarity, which enabled such sensitive information to be explored in great detail at her interview.

The advantages of keeping a diary were particularly noted in the researchers ability to ask very specific questions during the interviews raised by the women's recall of events through their diary entries and achieve in depth information in response. Many participants talked during interviews about how they used their diaries to record influences on their personal decision-making process about where to give birth. They carefully noted how specific conversations or incidents made them feel about their planned place of giving birth. For example, Anne felt she had been dismissed as a 'bored housewife' at an Obstetric Unit appointment, which confirmed her strong preference to give birth at the CMU, where she and her family were known and respected.

Researcher: "How did that come about?"

Participant : "It's in my diary.. she came into the room, didn't even open the notes, and I had my youngest with me, and she went, is this your first?. And I said no, fourth....and she went...oh we get a lot of bored housewives in here".

Researcher: "How did that make you feel?"

Anne, Interview 3.

Marie had written expressively about her distress at the pressure that she felt under to make her decision about where to give birth. Diary entries that she showed to the researcher at interview, included capital letters, exclamation marks and a series of sad faces which reminded her of the day-to-day difficulties she faced. At her interview she was surprised to see how strongly she had expressed her emotional reactions to the decision making process in her diary.

"When you're trying to make a really difficult decision [.....] I think that actually the diary, although I've been writing in it, I didn't realise how emotional I'd been...a big surprise for me about how emotional I was then".

Marie, Interview 2.

The women used their diaries in a variety of ways, but they all valued the opportunity to create their own personal and lasting memories of their pregnancies.

Strengths of Aide-Memoire Diaries

The strength of the private aide memoire diaries lay primarily in the way that they helped the women to contemporaneously remember with clarity details of their expectations, experiences and views on their maternity care. The focus, clarity and honesty with which women were able to engage with their interviews was enhanced by the knowledge that the memoirs would remain private unless they chose to share them, and did not need to be idealised (Alasewski 2006) for judgement or analysis by a third party. The topic guide questions prepared for each interview were adapted for each woman's personal journey through the maternity services provided at the CMUs as the women used their diaries to reveal their individual care needs and how these were acknowledged and addressed.

Limitations of 'Aide-Memoire' Diary Use

Some women chose to show the researcher their diary during or immediately prior to their interviews. This raised dual challenges of reading the women's handwriting, which proved as reported in diary studies to be time consuming (Richardson 1994), and understanding why they presented their diary to be read. When diaries were offered, the women were asked to point out entries they felt were particularly important. Reference to their diaries during the interviews allowed the women the opportunity to clarify any misunderstandings or dissonance between what she had written at the time and the experiences she was retrospectively discussing at the interview.

The use of paper diaries may have limited the scope (Stone et al. 2012) for the innovative use of the aide memoire diary. Three women used an application (App) on their smartphones, rather than the study paper version, but still kept a reflective record of their pregnancy journey, in the knowledge that it would remain private. These women referred to their phone diary during interviews to clarify information that they had felt important and recorded in their own shorthand text, taking the principle of the pregnancy diary and transferring it to their preferred format.

Conclusion

The use of the 'aide memoire' diary and interview method has allowed the researcher to achieve a contextually detailed account of women's experiences of care in the CMUs, that either method in isolation may not have revealed. The particular use of diaries in the CMU study allowed a new dimension of the diary interview method to be revealed. When participants were given the freedom to use the diary to privately record what they felt were important aspects of their care, they were able to use it to reveal their individual care priorities and whether those needs were acknowledged and addressed in an appropriate, person centred manner.

Privacy of the diaries appeared to have enhanced the participants' ability to record exactly how they felt without fear of judgement whilst retaining clear and detailed memories, particularly of emotional reactions to sensitive issues that may have faded over time during the

longitudinal study. It would seem that the private aide memoire diary and interview method has allowed access to an in depth understanding of the participants' uniquely personal experiences of the care they received.

References:

Alaszewski A (2006) *Using Diaries for Social Research*. London, Sage Publications.

Barbour R (2008) *Introducing Qualitative Research*. London, Sage Publications.

Bowling A (2014) *Research Methods in Health: Investigating Health and Health Services*. Fourth edition. Maidenhead, Open University Publications.

Bryman A (2012) *Social Research Methods*. Fourth edition. Oxford University Press, Oxford.

Eidse N and Turner S (2014) Doing resistance their own way: counter-narratives of street vending in Hanoi, Vietnam through solicited journaling. *Royal Geographical Society Area Online* : <http://wp.geog.mcgill.ca/sturner/files/2014/09/Eidse-and-Turner-2014-Solicited-journals-in-Hanoi.pdf> (Last accessed: 24th October 2016.)

Elliot H (1997) The use of diaries in sociological research on health experience. *Sociological Research Online*.

www.socresonline.org.uk/2/2/7.html. (Last accessed: 21st October 2016.)

Gerrish K, Lacey A (2010) *The Research Process In Nursing*. Sixth edition. Blackwell. Oxford.

Hayman B, Wilkes L, Jackson D (2012) Journaling: Identification of challenges and reflections on strategies. *Nurse Researcher* 19, 3, 27-31.

Hinsliff-Smith K, Spencer R (2016) Researcher Perspectives from a study of women's experiences of breastfeeding. *Nurse Researcher*. 23,3,13-17.

Kenton C (2010) Narrating Oneself: Reflections on the Use of Solicited Diaries with Diary Interviews *Forum: Qualitative Social Research*. <http://nbn-resolving.de/urn:nbn:de:0114-fqs1002160>. (Last accessed: 24th October 2016.)

Morse J (2000) Determining Sample Size. *Qualitative Health Research*. 10 (1) 3-5.

Parahoo K (2006) *Nursing Research*. Basingstoke, Palgrave Macmillan.

Powell I (2012) Can you see me? Experiences of nurses working night shift in Australian regional hospitals: a qualitative case study. *Journal of Advanced Nursing*. 69, 10, 2172-2184.

Schmied V, Johnson M, Naidoo N Austin M-P Matthey S Kemp L Mills A Meade T, Yeo A (2013) Maternal Mental Health in Australia and New Zealand: A Review of Longitudinal Studies. *Women and Birth*. 26, 2013, 167-178.

Stone A, Shiffman S, Schwartz J et al., 2002. Patient non-compliance with paper diaries. *British Medical Journal*. 324, 7347, 1193-1194.

Thomas J (2015) Using unstructured diaries for primary data collection. *Nurse Researcher* 22, 5 25-29

Valimaki T, Vehvilainen-Julkulnen K, Pietila A-M (2007) Diaries as research data in a study on family caregivers of people with Alzheimer's disease: methodological issues. *Journal of Advanced Nursing* 59,1, 68-76.

Way S (2011) The combined use of diaries and interviewing for the collection of data in midwifery research. *Evidence Based Midwifery*. 9, 2, 66-70.

Your Pregnancy Diary



Thank you for taking part in this study and agreeing to keep a pregnancy diary.

Your diary is for you to record your thoughts and experiences of care during your pregnancy, labour and giving birth. Try to remember to note down any information you are given and how this has influenced you, and the decisions you make.

For example, you may want to write about any appointments you have with your midwife or doctor or about discussions with your partner, family members and friends. It may even be something you read or see on television that makes you perhaps think about where you would like to give birth to your baby.

Feel free to write about anything that is important to you.

The diary is yours to keep at all times, and will not be read by any midwives or doctors caring for you, or the researcher, unless you choose to show it to them.

Page no	Comment	Amendment
3	Strike out "for analysis"	removed
6	Avoid consecutive sentence openings	Sentences restructured
7	Strike out "objectives of the study...."	'Sought' inserted to avoid repeat of previous sentence
8	Strike out "provide an aide...." Add reference to support "unusually for diary studies" Why did other studies collect diaries How many did/didn't use diary How was use of diary defined	Help inserted References provided Explanatory sentence inserted Numbers clarified Use of diary evidenced
10	Strike out "developed for..." And "with the aid.." Who is 'she'? Could it be that others had kept but not shown diaries?	Wording simplified She removed and the researcher inserted Clarity given on women referring to diary entries when asked about experiences
12	Indicates researcher reading diaries was advantageous. Missing word?	Clarity given that women's recall using diary was advantageous Word 'and' inserted
13	Spelling error	Corrected
15	Confusing/contradictory - still indicates researcher reading diaries advantageous	Reworded to emphasise women using entries not researcher reading them was useful
17	Reference error	Corrected