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## Digging deep: Using diary techniques to explore the place of health and well-being amongst older people

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### Abstract

To date, solicited diaries have been relatively neglected as a social science research method. This is particularly true within the field of health research. Yet, these narrative approaches can provide invaluable insights into the health behaviours of individuals and how these are played out across time and space. To illustrate this, we draw on recent research in the north west of England that investigated the potential benefits of communal gardening as opposed to other social activities in maintaining the health and emotional well-being of older people. As part of a wider study using largely qualitative techniques, our analysis revealed that, contrary to the findings of earlier studies, diaries can be used effectively over relatively long periods of time and are equally effective in exploring health issues amongst both older men and women. With the benefit of good researcher support, we argue that diary techniques can offer some unique insights into the ongoing health routines and coping strategies of older people and can prove invaluable in uncovering those, often hidden, aspects of their daily lives and routines that impact on their health histories. Through the gathering of chronologically organised data about daily activities, diaries can act as both a record and reflection of the health experiences, activities and life-worlds inhabited by older people.

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### Introduction

In recent years we have seen an increasing emphasis on using narrative methods as a means of engaging in participatory and empowering health research. Researchers such as Thomas (1999) and Grinyer (2003) have used narrative correspondence as a means of eliciting insights into the health experiences of vulnerable groups. While Thomas's work highlighted the usefulness of this technique for drawing out some of the negative health encounters experienced by disabled women during pregnancy, Grinyer's use of this approach enabled her to uncover the, often poignant,

accounts of the parental experiences of living with young adults with cancer. Such approaches place control over the data in the hands of participants, enabling them to not only consider their written responses but also offering them the opportunity to reveal as little or as much as they feel willing to do so. One additional device within the narrative methods 'toolbox' is that of the solicited diary. Diaries form part of a research process in which the informants actively participate in both recording and reflecting on their own behaviours, and while inevitably they are written with a certain agenda in mind, those designed to facilitate semi or unstructured responses allow room for diarists to depict their own priorities. As such, they can prove useful for capturing the meaning and weight respondents attach to different events and problems in their lives. Meth's (2003) recent

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portrayal of the experiences of violence amongst South African women further illustrates that diary approaches offer potential for researching highly sensitive issues that may be difficult to broach using more conventional face-to-face research methods. Meth's work demonstrates, moreover, that written accounts of this kind can prove a cathartic experience for some research participants, as one respondent in her study commented, "Writing the diary was a task I liked to do .... I also felt relieved. It was like a big luggage has been removed from my shoulders" (2003, p. 201). Diary methods, then, not only offer a means of engaging in participatory research with vulnerable groups but they can provide useful tools for gathering those kinds of data that may be seen as too sensitive to approach through other qualitative approaches.

Despite these apparent benefits, social scientists have largely failed to take full advantage of the insights that diary techniques can offer (Johnson & Bytheway, 2001). What is, perhaps, more surprising is the lack of attention those social scientists working in the field of health research have given to these narrative approaches. This is particularly so, given that health diaries have been widely used in medical research for at least 30 years (Waldron & Eyer, 1975; Banks & Beresford, 1979). In the main, however, such work has focused on the use of structured diaries with diarists 'logging' items from a list of health actions they have undertaken (see for example, Frick & Unsworth, 2001; Rook, 2001; Morey et al., 2003). Rooks's work typifies this approach using daily diaries, composed of fixed response questions, to assess the effect of social exchanges on the emotional well-being of older adults. She maintains that 'the term *diary data* [sic] may connote unstructured narrative accounts that are subsequently coded, but [in medical research] diary data are typically collected through the use of checklists and other fixed response formats to reduce respondent burden and ensure that theoretically relevant dimensions of daily experience are captured' (p. 89). The vast majority of health diaries, then, comprise largely of the regular logging of data, over a set period of time, in a structured format not dissimilar to that of survey techniques.

Research using open or solicited diaries within qualitative health research is rare. Yet this approach has a useful contribution to make, in that it facilitates the capturing of the diarists' own priorities and understanding about what are often taken for granted issues in accounts of health and illness (Elliot, 1997). Further, the quantity and quality of data provided through the diary method is likely to be significantly different from that available through questionnaire and interview approaches and can offer a more comprehensive picture of an individual's activities (Milligan, 2001). Not only are diaries less subject to the vagaries of memory, retrospective censorship or reframing than other auto-

biographical accounts, they also provide an important means of uncovering the routine or everyday processes and events that may be viewed as trivial and therefore easily forgotten (Verbrugge, 1980). They have the ability to capture events close to when they unfold and the potential to trace events over continuous time and across space. So, whilst time-limited diary approaches lack the continuous flow of life histories, they nevertheless offer either daily or regular written accounts of events and 'as such, provide a record of an ever-changing present' (Elliot, 1997, p. 2). In this way, they allow the researcher to 'track the contemporaneous flow of public and private events' (Plummer, 1983, p. 170).

It is perhaps critical, here, to make the distinction between the use of solicited and unsolicited diaries. There may clearly be ethical concerns surrounding the use of unsolicited diaries, where accounts written for the private gaze are exposed to public scrutiny and analysed for both a purpose and an audience for whom they were never intended. Solicited diaries, however, are quite distinct in that they are constructed with a specific research purpose in mind and completed by participants in the full knowledge that the contents will be analysed and written about by the research team.

Our concern in this paper is, thus, to examine the potential of solicited diary techniques for gaining insights into health-related issues that will be of interest to those working in the social sciences. Drawing on work undertaken as part of a Healthy Ageing Initiative in the UK we explore how diaries can be used to map out the health-related behaviour and activity patterns of older people. We also critically examine some of strengths and weaknesses associated with the use of diary research in relation to our own study. Before doing so, however, we briefly outline the overall research design as a means of contextualising the place of diary techniques within the study.

#### Placing diary techniques within the wider study design

The paper draws on data gathered in a 2-year in-depth study that included an intervention over 9 months (between March and November 2002). Conducted in Carlisle, a city in the north west of England, the study targeted electoral wards in the south of the city that has comparatively high levels of social and economic need (Office of National Statistics (ONS), 2001), with the aim of exploring the extent to which different kinds of gardening and social activities might help to promote the health and mental well-being of people over the age of 65. In particular it focused on the benefits of communal gardening on an allotment sites and social club activity (see Milligan, Gatrell, & Bingley, 2004).

Seventy-nine people aged between 65 and 91 were initially recruited to the study through GP lists (31 males

Table 1  
Numbers of participants by age group, previous occupation, living situation and accommodation

Categories		65–69 years	70–74 years	75–79 years	80+ years	Total
Number in age group		31	25	12	11	79
Previous occupation	Management/professional	7	10	1	2	20
	Clerical	13	5	4	5	27
	Manual	8	7	6	4	25
	House/care work	3	3	1	0	7
Living situation	Alone	7	8	8	8	31
	Spouse	22	14	2	3	41
	Family	2	3	2	0	7
Accommodation	Owner-occupied	29	17	10	7	63
	<i>Local authority</i>	2	2	2	2	8
	Private rented	0	3	0	2	5
	Sheltered housing	0	2	0	0	2

and 48 females).<sup>1</sup> The only inclusion criterion was that participants should be over the age of 65, not mentally confused and have some physical mobility (i.e. the ability to walk at least a hundred yards unaided). Carlisle is a city in which 99.1% of the population is white (ONS, 2001), hence though the study was open to older people from all ethnic groups, participants were exclusively white. Recruits participated in one of three activities: gardening on allotment sites with the support of a full-time, qualified gardener (employed by the project); participating in a weekly social club set up by the participants; or participating as part of a 'reference group' whose main role was to record their normal daily activities. As detailed in Table 1, participants came from a range of age cohorts and socio-economic backgrounds. Around 40% of the participants lived alone—the remainder living either with a spouse or other family member.

Attrition, due to either the ill-health of the participant or their spouse, during the initial stages of the study reduced the overall number of participants to 69.

The study used a mixed methodology. All participants completed a quality of life questionnaire both prior to, and at the end of, a 9-month period of fieldwork. Sixty-six participants also took part in in-depth discussions (either focus groups and semi-structured interviews) at both the beginning and end of the intervention. The discussions aimed to explore participants' self-assessment of, and factors affecting, their physical and mental health status. During the intervention, longitudinal data was also gathered about activities and factors affecting the health and well-being of participants through the completion of weekly diaries. The diaries were supple-

mented by regular visual and observational data gathered by the project researcher and regular verbal and written reports from the gardener/social club coordinator in relation to the gardening and social club activities. All data were transcribed in full and analysed using a grounded theory approach with Atlas/ti qualitative software. This approach facilitated the gathering of a significant body of rich data surrounding participants' activities, yielding some important insights into the ways in which the gardening and other social activities contribute to the health and well-being of older people.

#### Designing diaries to explore the health and activity patterns of older people

While the wider study incorporated a range of research methods, in this paper we wish to focus specifically on the contribution that solicited diary approaches can make to health research amongst older people.

Keleher and Verrinder (2003) point to three key areas where health diaries have been effective:

- (i) as a primary data source;
- (ii) as a memory aid to improve recall of events for later retrospective interviews; and
- (iii) as methodological studies to improve recall of events for retrospective and prospective procedures.

In our study, diaries were used to gather primary data on the health and activities of older people. Health diaries, however, vary considerably in complexity and form. Most common is the journal-type approach, but ledgers (i.e. using a separate page for each type of event),

<sup>1</sup>More detailed information on the project and its design are available in the project report available at: <http://www.lancs.ac.uk/fss/ihr/research/mental/cultivatinghealth.htm>.

Table 2  
Diary participants by group

Group	Total no. participants	No. males	No. females	% males per group	% females per group	% all participants
Garden	23	13	10	56	44	33
Social	27	4	23	15	85	39
Reference	19	9	10	47	53	28
All	69	26	43	38	62	100

log books, questionnaires and calendars are also used. Whilst typically diaries may be completed over a 2–4 week period (Keleher & Verrinder, 2003), some researchers have used diary approaches to examine detailed accounts of daily activities over short periods of time. Ross, Rideout, and Carson (1994), for example, used semi-structured diary techniques to explore the care-giving work of nurses both at home and in their clinical practice over a period of only 2 days. Conversely, Lawrence and Shank (1995) used a diary approach to examine the health care of young women for a period of over 6 months. More recently, Convery, Bailey, Mort, and Baxter (2005) used diary approaches to explore the health and social impacts on farming communities of the recent (2001) Foot and Mouth disaster in the UK over an 18 month period. While Verbrugge (1980) maintained that most diary studies produce insightful data, she qualified this by adding that the length of diary keeping can impact on the quality of the data gathered and the response rate. A short diary (e.g. 1–2 days), for example, may be atypical of other days of the week or month, whilst anything over 2–3 months, may induce respondent fatigue. Drawing on our own research, we explore these and other issues relating to the use of solicited diaries below.

As previously indicated, participants chose to take part in either communal gardening activity, a regular weekly social club or simply to report on their everyday health and activity patterns (the 'reference group'). While, initially, the gardening and reference groups had a fairly even gender balance, we found women to be more enthusiastic about participating in the social group than men—hence this group was weighted more towards women from the outset. While we have no firm evidence to indicate why men were more reluctant than women to participate in the social group, our subsequent interview data indicate that in northern England, there may be a gender association with this type of club, with older men preferring to socialise within more 'masculine' environments such as ex-servicemen's clubs or those associated with specific sports e.g. golf and bowling. Early attrition due either to their own ill-health or that of their partners, also meant that the gender balance in the gardening group was rather more weighted towards men (see Table 2). All participants were asked to complete and return a weekly diary. In sum, we gathered diary

*What activities have you been involved in this week?*

*What did you enjoy most about these activities?*

*What (if any) did you enjoy least about these activities?*

*Are there any other comments you would like to make about your activities and how things have been for you this week?*

Fig. 1. Page 3 of diary (narrative prompts).

data from 69 participants, each of who completed weekly diaries between March and November 2002 (see below).

In sum, we gathered a total of 1609 completed diaries out of a possible 1982<sup>2</sup> representing a completion rate of 81%. The median number of weeks completed by these 69 participants was 23 weeks. An initial meeting with participants provided the opportunity to discuss the purpose of the diary and how and when participants should complete them. The diary comprised a three page 'booklet' which was given, or sent, to participants on a weekly basis. The first page consisted of a simple front cover containing the week number and participant code, instructions for completion of the diary and contact details should a participant wish to speak with a member of the research team. The second page involved participants entering a numerical score of self-assessed general health and mental well-being that related directly to the health questionnaire (based on the SF-36) completed by all participants at the beginning and end of the project. The final page consisted of an open text page, with narrative prompts (see Fig. 1), where participants were asked to write about their weekly activities—both those undertaken as part of the project (where relevant), as well as any additional activities in which they participated over the course of the week. Participants were also prompted to write about any events or incidents that may have affected their health

<sup>2</sup>All diarists were to have completed diaries over a 30 week period; however, researcher illness meant that, in reality, our 'reference' diarists did not receive diaries during 2 weeks of the research, this also coincided with 1 week of the gardener/social club organiser's annual leave reducing possible completion period for reference group participants to 28 weeks and other participants to 29 weeks.

and well-being. Respondents from all three groups wrote about events in their everyday lives, including ideas, thoughts and feelings connected to their health and activities. Diarists could write as much or as little as they wished and were encouraged to continue writing on additional sheets if necessary. This approach to diary completion gave respondents the opportunity to write about what was important to them and structure their entries as they felt appropriate.

Participants in the gardening and social groups were given time to complete their diaries as part of a weekly session with the gardener/social club organiser employed by the project team for the duration of the study. They did, however, have the option of completing the diaries in their own time, returning them to the organiser at a later date, if preferred. Those in the reference group were sent diaries, together with a reply paid envelope on a weekly basis. The project researcher kept a record of all returned diaries and where participants failed to complete, made contact to investigate why this had occurred. This contact proved to be of critical importance to the study, in that it contributed to the development of a personal link between the researcher and researched, enabling the researcher to offer support and encouragement to participants. This in turn helped to maintain diary completion rates and facilitated our understanding of why participants failed to return diaries at particular times throughout the study. Reasons for non-completion fell mainly into two categories: (a) absence from the home due to holidays; and (b) illness (of the participant or close family member). The researcher contact also acted to prompt participants to continue completing their diaries following their return from holidays or recovery from a temporary illness.

Others writing on the use of diary techniques in social research (see for example Keleher & Verrinder, 2003) maintain that diary studies are most likely to be effective where respondents are women rather than men. Whilst, overall, a higher percentage of women did, indeed, complete diaries in our study (see Table 2) this was a function of the gender imbalance in the total number of participants rather than a greater tendency amongst women to complete than men. Hence, in the gardening group, where the gender balance favoured men rather than women, there was a higher male completion rate, a scenario that was reversed in the social group for the same reasons. More interestingly, in the reference group, where the gender balance was relatively even and completion did not form an integral part of any group activity, we found little gender difference in completion rates. Nine men and ten women regularly completed diaries throughout the course of the study. Further, we found little evidence of a gender difference in the quality of diary entries made. While some participants wrote detailed accounts of their weekly health and activities

and others wrote brief, but informative accounts—we found this to be the same amongst both men and women diarists. Hence, based on our study, it would appear that amongst older people, solicited diaries can, in fact, be used to equal effect amongst both men and women.

#### **Digging deep: Diary insights into the health and activity patterns of older people**

In this section, we draw on diary data gathered in our study to illustrate the extent to which diary techniques may prove useful as a means of illuminating the interrelationships between health, environment and activity patterns of older people.

##### *Differential response modes*

At 81%, the completion rate for diarists in this study can be seen as highly successful; however, it is worth noting that people approach diary keeping in very different ways. We found considerable variations in the length of entry and the degree of intimacy in their revelations, though this did not appear to be linked to their living status. That is, variations occurred amongst diaries completed by both lone dwellers and those living with a spouse or other family member. As the following two examples illustrate, some participants took a very reflective approach that conveyed their feelings and emotions, as they wrote detailed accounts of their activities and factors impacting on their health and well-being over the course of the week. Others wrote only a few lines, adopting an approach that represented a more straightforward reporting of events.

Hugh<sup>3</sup> (aged 73, lives with spouse)

##### *1. What activities have you been involved in this week?*

An unusually busy social week. Monday: the Queen's Garden Party at Carlisle Castle (we were both presented). Thursday a lunch party for six; Friday a tea party for company retirees—about 36 of us altogether. Serious gardening in-between times—major tree-surgery, grass cutting and general tidying up.

##### *2. What did you most enjoy about these activities?*

Showing off the garden and the new garden room, and seeing friends and ex-colleagues—lots of good humour and good wine!

##### *3. What (if any) did you least enjoy about these activities?*

Fitting in the necessary gardening was probably too demanding given the time and weather constraints.

<sup>3</sup>To preserve anonymity, pseudonyms are used throughout the paper.

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For three or four days, I and my wife were on our feet ten hours per day with hardly a break, collapsing exhausted into a hot bath at about nine, and not eating until 9.45 p.m. or so.

4. *Are there any other comments you would like to make about your activities and how things have been for you this week?*

It was an especially energetic week to the point that it ceased to be fun. Nerve-wracking also—would the recovered cane furniture arrive in time? It did just, at about 10.00 p.m. one evening. So drained were we, that we decided to have a gardening free weekend, which is a novelty. But writing on Monday, I can say the strains and stresses seem to have eased. Soaking my tired and ageing limbs in the bath, I dwell sometimes on the scenes one sees on TV—of footballers having their limbs massaged directly, I imagine, after a few minutes on the training ground. I am sure I would benefit from this. Perhaps the garden room should be converted into an injury clinic!

Nissa (aged 72, lives with spouse)

1. *What activities have you been involved in this week?*

Mon: Fine day so I varnished two garden seats and the conservatory.

Tues: Wet. Ironed for myself and family. Walked to shops for paper.

Wed: Varnished garage door and started painting fences.

Thurs: Quiet day, had hair permed, shopped, cut grass.

Fri: Finished painting fences.

2. *What did you most enjoy about these activities?*

I have a list of jobs I need doing—it is nice when I can tick some of them off!

3. *What (if any) did you least enjoy about these activities?*

Back ache!

4. *Are there any other comments you would like to make about your activities and how things have been for you this week?*

As I said in my earlier diaries, I had no energy, I felt so tired and lethargic. I was having really bad dizzy turns and sickness. I can't believe how much better I feel.

Note: Gardening referred to in both the above excerpts refer to that undertaken within their own homes.

Nissa's diary entry reveals that while she leads a busy and active life, her activities tend to be focused around maintaining the home and supporting her family.

Hugh's diary, however, reveals a high level of social and physical activity that occurs both within the home and beyond. Yet, it is clear from his account that he believes such a level of activity is unsustainable and were it to continue over time it would impact adversely on his health and well-being. Prior and subsequent diary entries enabled us to map out both Nissa's and Hugh's patterns of health and activity over a sustained period of time, and in particular, Nissa's diary entries give us a clear picture of how her activity patterns change as her health improves.

Other diarists revealed intimate details of their family lives and relationships that impinged significantly on their own health and well-being. Lucy (aged 68) who lives alone, for example, wrote of the importance of her family in helping her through a period of illness, "I am at last back to my normal fit and happy self. For a while I felt quite low, but thanks to the help and support of my daughter and her family, and to my own determination, I got over this. I never take good health for granted, and think myself lucky to be so fit and healthy at my age, so I do my best to keep myself that way." While Florence's (aged 73) diary accounts revealed how despite her age-related health problems she was able to maintain a busy and active social life, woven through her narrative is an ongoing account of the adverse impact to her own well-being caused by the difficulties of having her adult son live with her. In her diary she notes, "Apart from the usual (indeed almost daily) arguments with my son, 42, who lives at home and is suffering a viral illness which no-one seems to be able to do anything about, I have had a good week. I do, however, find my son's controlling attitude difficult to deal with—I can do nothing right as far as he is concerned! However, I try not to let it get me down." Over a period of weeks, she notes her increasing depression over their disagreements and their inability to live harmoniously together, describing his presence as a 'black cloud over everything at home'. At various times, her diaries describe how his presence drives her to 'keep out of his way', seeking solace among friends or in therapeutic places where she can relax and unwind. Thus, in one diary entry she notes, "On Saturday, things were so fraught that I just went off out in the car and sat in the countryside for an hour enjoying the birds and views, out of his way, and remembering my late husband." Eventually, Florence sought medical help from her doctor, but is advised to take a drink instead when things get particularly difficult! Following this, she notes, "this week I had a sherry (twice) and a gin and tonic (once) to calm me down." The ongoing account disclosed in Florence's diary entries thus reveals how the tension she experiences within her home environment is contributing to a breakdown in her health and well-being. Rather than viewing the home as a haven from the stresses of the external world, she actively seeks particular people or

places outside the home environment that help her to deal with the stresses within.

It was notable that participants from the reference group tended to write more detailed and reflective diary accounts than those from the gardening and social groups. For the reference group, this was their core activity within the study and thus their main means of relaying their weekly health and social experiences to the research team. Older people participating in the social and gardening clubs had more regular face-to-face contact with the researchers through their group activities and field discussions.<sup>4</sup> Hence, they were provided with more opportunities for conveying information about issues and events occurring in their daily lives to the researcher, reducing the need to relate these events through their diaries. This suggests that while diary techniques can be used as one strategy of several for gaining a more complex whole (as with the gardening and social groups) where regular observational methods are also used, this may impact on the level of detail participants feel is required in their diary entries.

As Sheridan (1993) pointed out, however, some people are also more predisposed to be diarists than others, and will use the opportunity to reflect on and record events in their everyday lives, whilst others will view the task as a more boring and repetitive activity—a chore to be completed. This was certainly evident in our own study, and as with all research, there will always be some participants from whom it will prove difficult to gather written or oral data. Fred (aged 77) for example, who lives alone, though clearly enjoying the communal gardening activity, wrote brief and often repetitive accounts in his diaries:

1. *What activities have you been involved in this week?*

Shopping and planting and sowing seeds.

2. *What did you most enjoy about these activities?*

Keeping fit and fresh air on the allotment.

3. *What (if anything) did you least enjoy about these activities?*

None

4. *Are there any other comments you would like to make about your activities and how things have been for you this week?*

Going to Greece for a week with my daughter on the 7th of May, back one week later.

Fred was equally brief in his interview responses. Whilst the visual and observational data gathered as part of the wider study enabled us to gather some rich insights into Fred's relationship with plants, the landscape and his attitude to the communal gardening activity, it was clear that neither written nor oral techniques would prove completely effective in giving

us an insight into his health and wider social activities. Yet Fred was the exception rather than the rule. While Hugh and Nissa are also illustrative of differences in people's disposition to diary writing, Nissa's diary still gave us a detailed picture of her everyday activities and her feelings of relief at the improvement in her health status. Her early diary accounts revealed how her high levels of activity at the beginning of the project declined with the onset of an illness that left her feeling sick, dizzy and lethargic. Nissa's illness resulted in a gap in her diary completion, yet she resumed in week 18 noting, 'Sorry I haven't been sending the diary but I have been feeling under the weather. I have had no interest and no energy to do much. Thank goodness I picked up!' The following week 'Nissa' relates her worry over the continuation of her symptoms, the possible cause, and a reluctance to go out on her own in case she becomes unwell. This resulted in a contraction of her life-world with most activity becoming centred around the home or local neighbourhood. A visit to her doctor resulted in a referral to an Ear, Nose and Throat specialist, followed by treatment of the physical symptoms and a return to her former levels of activity outside the home. Concomitantly, 'Nissa' regained a sense of her own well-being.

Despite her relatively brief responses, then, through the completion of weekly diaries, we were able to gain a detailed and longitudinal picture of Nissa's everyday life and activities that is distinct from the single 'snapshot' gained through interview methods. Similarly such detailed longitudinal insights would be difficult to achieve with multiple numbers of participants using observational approaches. Using the diary technique, we were able to gain an ongoing insight into Nissa's 'health history' over a 30 week period. This illustrated how poor health affected her ability to maintain her everyday activities. The restricted social and spatial environments she was able to inhabit, subsequently impacted on her sense of well-being. So, while diary techniques are subject to differential response modes, as the accounts outlined in this section illustrate, they do offer opportunities to draw out interconnections between health, environment and everyday life that can be of significant value to those working in the field of health research.

#### *Diaries and older people—benefits and constraints*

Diary keeping is dependent on short-term memory with participants unlikely to forget an event if they get into a regular habit of recording entries. As Keleher and Verrinder, (2003, 440) note, "memory lapse and telescoping (i.e. remembering events but forgetting the correct date) are minimised in health diaries, which therefore provide the ideal opportunity to gain a comprehensive view of people's health and health behaviours". Such an approach can, thus, offer a

<sup>4</sup>All field discussions were audio-recorded for later analysis.

particularly useful means of capturing events amongst older people where short-term memory may be less acute than in younger years (De Beni & Palladino, 2004).

What is perhaps most significant about the use of diaries in our study is that, contrary to the perceived wisdom that such methods are best used over relatively short periods of time with participants completing on a daily (or more frequent) basis, we found that, carefully monitored, diary methods can also be used successfully over relatively long periods of time with completion on a weekly rather than a daily basis.

Diary techniques can not only prove a useful way of capturing a longitudinal picture of the health and activities of an older person over time, but can also reveal how older people make decisions in relation to prescribed medication in ways that can impact on their health outcomes. The excerpt from Florence's diary (below) further highlights the utility of diary techniques as a means of identifying those self-care practices undertaken by older people that may be overlooked in more 'snapshot' approaches to research.

The previous week I had attended the Diabetic Clinic where the doctor prescribed two new pills—one in addition to my usual blood-pressure medication—the other for cholesterol. After four days, I realised that I had become very, very dozy—and then I bumped into a tree during my morning walk and realised that I had been virtually sleep-walking! So I stopped the additional blood pressure pill. This week [sic] I felt great again—so will perhaps give the pill another go, at the weekend and if the dozy feeling persists, go back to the doctor and report. Also I have had an aching shoulder for the past four to five days—I can't think why. Rubbed it with 'Ibuleve' but it persists. 'Old age' probably! It hasn't stopped me doing anything but it does nag.

Florence's account not only demonstrates how she monitors and self-adjusts the prescribed medication she receives for her chronic health problems without medical consultation, but also reveals how she makes clear decisions about those health incidents she views as worthy of reporting to her doctor. Other incidents, while still painful, are seen as an almost inevitable aspect of the ageing process—something to be self-treated where possible, but essentially to be accepted and endured.

Hence, the diaries also revealed the stoic acceptance of the physical limitations often experienced in older age and the limitations this can place on participants' lives and everyday activities. Almost all participants viewed health as a relative concept, with participants' own health being defined in terms of the extent to which it may be better or worse than that of a friend or colleague of a similar age. Most compared their health to that of an older friend or acquaintance whose health they

considered to be considerably worse than their own, enabling the participant to express their good fortune that their own limitations were considerably less than those of their acquaintances. As Oliver (aged 67) put it when referring to a back complaint, "You think on people who are worse than yourself that are like that all the time and you think, they have to live with that continually!"

Our study revealed how diary completion made some of our older participants increasingly aware of own patterns of behaviour, health and activity over time. Through their diary-keeping, they were able to reflect on their own health, activities and social networks in ways that seemed to enhance their capacity for observation about issues they were experiencing. Indeed, it was clear that, for some, the diary keeping process offered them an opportunity to reflect positively on their lives, often expressing surprise at how often they went out or had visitors and the extent of activity they engaged with over the course of a week. For others, it outlined the repetitiveness of their patterns of daily life. Yet, as Nissa commented in her last diary entry, 'Doing this project has made me look at the way I live from day to day. I try to do something quite active most days because I find that I feel better in both body and mind—and I sleep much better too.' Hence, for some, the act of diary completion, in itself, provided a positive or therapeutic activity.

#### *Exploring the limitations to diary techniques*

Diary approaches, of course, do have their limitations. They can prove problematic for those with limited literacy skills, or amongst those older people whose declining health makes writing a difficult and laborious chore. Similarly, older people can be subject to increasing levels of visual and intellectual impairment making it difficult to perform those reading and writing skills necessary for diary completion (Johnson & Bytheway, 2001). However, the decision to complete a diary or not was entirely optional in our study and as Table 1 illustrates, those older people who did choose to complete came from a range of differing ages and differing socio-economic backgrounds. Previous occupations ranged between factory worker and bus driver to industrial chemist and care home proprietor. We would also point out that narrative and diary techniques can offer an opportunity for those who are less articulate (and may thus be less responsive in an interview or focus group scenario) to reflect on their responses and answer in their own time, at their own pace, without feeling 'rushed' or 'flustered' by the presence of the researcher. Unlike interviews or observational approaches, diaries are not limited by the amount of time the researcher is able to devote to the process (Zimmerman & Wieder, 1975). Furthermore, where limiting visual or literacy



skills prove a barrier to using diary approaches, it may be possible to offer the option of submitting audio-diaries instead.

It is important to note that though diaries enable participants to have a degree of freedom to write about those issues that are important to them, they are nevertheless commissioned specifically for research and as such are not private documents. Rather, as noted earlier, they are written with a specific reader and agenda in mind and are thus very different from the private diary or memoir (Elliot, 1997). It must be assumed, then, that these diaries are written with a strong awareness of the researcher and a potential concern from the diarist about how his/her account will come across. Yet, as Pavis, Masters, and Cunningham-Burley (1996) noted in their own diary study, this self-consciousness declines over time. We found this to be particularly true in our study. When asked about their experiences of diary writing in the final focus groups and interviews, many respondents commented that not only did they enjoy the experience, but over time the depth of information they revealed actually increased. As Hugh (aged 72) commented, "I was putting very little in [to the diary] to begin with and then I expanded over the weeks—and in no time it's become a confessional! All my innermost secrets are going to be revealed to the world! It becomes more personal. But I really quite enjoyed doing it. It gives you an opportunity to reflect, however briefly, on the circumstances that surround you. Yeah, so I've enjoyed it."

Such comments run counter to the work of Verbrugge (1980) and others, who found that the increased length of a study can impact adversely on the quality and response rates of diarists. In particular, such work suggests that where diary completion exceeds 2–3 months there is likelihood of respondent fatigue. Undoubtedly this may be the case amongst some groups and individuals, but in our study we found little evidence of any decline in response rates or quality of the data over time. The response rates may, of course, be linked to the amount of available time participants have for diary completion, hence retired people may have more time available than those in full-time employment and/or families to care for. Nevertheless, we would maintain that while respondent fatigue may be an outcome it is not a *necessary* outcome—the key, in our study, was continued researcher support. Indeed, amongst our older participants, the reverse appeared to be the case. As individuals became more at ease with the diary process, they wrote increasingly more detailed and personal comments. As Hugh commented, "I enjoyed doing the diaries because it made you reflect on what's been happening. You start with the feeling that—well, bugger all has happened this week, and then you search your mind and realise that, god, I did do this, I did do that or the other. Then I read it after I've completed it,

and you know, I was under the impression much had happened this week, but I've been here, there and everywhere! All sorts of things have been happening!" Hugh's comment also suggests one further therapeutic aspect of diary approaches, that is they can encourage people to re-frame their personal narratives in new and more positive ways.

In considering diary techniques it is also important to consider possible difficulties in the interpretation of the diary material. While diaries offer the potential to interrogate the data through discourse analysis, in this study our research aims suggested thematic/content analysis of the data would be more fruitful. This analysis facilitated an understanding of the ongoing social and activity patterns of older people over a sustained period of time and how this is bound up with their health and well-being. One potential problem with this approach lies in attempting to compare data where diarists exhibit significantly differing response modes (as outlined earlier). Where diary techniques are used as a stand-alone method this may create difficulties in interpretation across cases. In our study, however, these differences were mitigated by additional data gathered through visual, observational and interview methods. It does, however, raise questions about whether solicited diaries can be successfully used as a stand-alone method of data collection or whether, as with our study, the data they yield require to be rounded out through additional techniques. This perhaps needs closer investigation, but in our study, it was noticeable that participants in the reference group (where diaries were the sole method of regular participation) gave greater levels of detail in their diaries than those involved in activities where observational and visual data were gathered. This suggests that solicited diaries do have the potential to be used as a stand-alone method over a sustained period of time, although based on our own analysis we would add that the nature and form of the narrative prompts needs careful consideration (i.e. whether the study require reflective prompts or not) and subsequent explanation to participants.

#### Concluding comments

In this paper, we have sought to illustrate the benefits of using narrative—specifically solicited diary—techniques for researchers working in the field of social science health research. In exploring the role of communal gardening and other social activities in maintaining the health and mental well-being of older people, we used solicited diaries as one method of data gathering in a wider study using [largely] qualitative techniques. Our analysis revealed that, though there may have been some problems of interpretation without the additional data, the diaries did offer up some unique insights into the

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ongoing health, routines and coping strategies of older people. Through the gathering of chronologically organised data about participants' daily activities, the diaries acted as both a record and reflection of their health experiences and activities over time and space. As we have illustrated in this paper, diaries can help to reveal not only what actions a respondent took, where and why, but also what actions they did not take, or intended to take. In particular, we would point to the value of diaries in bringing to the foreground the 'taken for granted' in accounts of older people's life-worlds—thus enabling researchers to uncover those hidden or muted facets of their everyday lives.

As with all research methods, diary techniques have their limitations and where used in health research in the past, they have often been employed either as a quantitative data-gathering tool, or as an adjunct to other methods (e.g. as a point of referral or 'prompt' for subsequent interviews or focus groups). While it is certainly true that diaries formed only one of a range of methods in our study, our analysis indicates that carefully designed and supported, they can produce insightful data that make it possible to employ them as a useful research tool in their own right. Further, our study indicates that some of the assumed weaknesses of diary techniques—such as respondent fatigue over time and the tendency for diaries to be a more effective research tool amongst women rather than men—do not necessarily hold true. In particular, our study revealed that diaries can be used successfully over relatively long periods of time with weekly rather than more frequent rates of completion. Furthermore, amongst older people, at least, we found that not only were men and women likely to respond in equal measure, but that over time, respondents became more at ease with the diary process, which in turn led to their submission of increasingly personal and insightful data.

To date, qualitative diary techniques are an under-used method in the health researcher's toolbox, yet we would suggest they can offer unique insights and increased opportunities to understand the context in which health and illness is experienced, needs expressed and accounts given in ways that are both powerful and empowering to the participants, themselves. The key to the success of using this approach, we would emphasise, is ensuring continued researcher support throughout the period of diary completion.

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