People with epilepsy obtain added value from education in groups: results of a qualitative study

L. Ridsdalea, S. J. Philpottb, A.-M. Krooupaa and M. Morganb

*a King’s College London, Institute of Psychiatry, Psychology & Neuroscience, London; and b King’s College London, Division of Health and Social Care Research, Faculty of Life Sciences and Medicine, London, UK

Keywords: epilepsy, experiential learning, patient education, self-management, social stigma, social support

Received 15 July 2016
Accepted 4 January 2017

Background and purpose: Having epilepsy requires individuals to learn about self-management. So far, trials of self-management courses have not included in-depth qualitative evaluations of how the learning method influences participants’ perceptions and behaviour. We aimed to interview participants who had attended a course, as part of a randomized controlled trial, to examine: (i) their perceptions of what they valued and negative aspects of the intervention, and (ii) whether and in what ways they continued to make use of the training.

Methods: Twenty participants were selected within 6 months of undertaking a course from the larger randomized controlled trial conducted in England. Semi-structured interviews were based on a topic guide.

Results: Participants’ characteristics were representative of the clinical and demographic characteristics of the trial group. Their mean age was 44 years, half were male, and three-quarters had had epilepsy for over 10 years and had experienced one or more seizures in the previous month. Participants valued the opportunity to meet ‘people like them’. Structured learning methods encouraged them to share and compare feelings and experience. Specific benefits included: overcoming the sense of ‘being alone’ and improving self-acceptance through meeting people with similar experience. Over half reported that this, and comparison of attitudes and experience, helped them to improve their confidence to talk openly, and make changes in health behaviours.

Conclusions: People feel socially isolated in long-term poorly controlled epilepsy. They gain confidence and self-acceptance from interactive groups. Expert-facilitated courses that encourage experiential learning can help people learn from each other, and this may enhance self-efficacy and behaviour change.

Introduction

Epilepsy is similar to type 1 diabetes in being a long-term condition that is episodically difficult to control, resulting in medical emergencies and risk of premature death [1–3], but epilepsy is twice as common [2,3]. Clinicians provide a diagnosis, and advice on medication, but day-to-day management requires attention to lifestyle, which must be undertaken by individuals themselves. People with epilepsy (PWE) would like more information [4]. However, self-management is influenced by personal and social attitudes [5], as well as being a cognitive process. Courses have been tested in long-term conditions, such as diabetes [6], and they are publicly funded in the UK [7]. Group courses have been evaluated for adults with epilepsy in some countries [8–10], and they are publicly funded in Germany.

In the UK, the advice given by Epilepsy Nurse Specialists to individual PWE has been evaluated [11],
but group courses have not. Group interaction may provide additional benefits in reducing social isolation and increasing confidence [12,13]. PWE tend not to disclose their condition, which is linked to their perception of stigma [12,13], and this can lead to them being socially isolated [12,13]. Isolation and loss of confidence may further undermine their ability to manage their lives [14,15]. This has economic as well as social implications. PWE who perceive their condition as being stigmatized are more likely to attend and reattend Emergency Departments for seizures [1]. For every one planned hospital admission for epilepsy, six are unplanned via Emergency Departments [16], some of which might be avoided with better ambulatory services [17]. Therefore, providing support that improves self-confidence may be cost-saving [5,18,19].

In this context, we are undertaking a trial of self-management education in groups focusing on people with ‘poorly controlled epilepsy’, defined as having two or more seizures in the past year while on medication [20,21]. This group makes up approximately 40% of PWE [22].

In chronic conditions for which there is an evidence base, the relationship between providing education and achieving change in self-management remains largely unexplained both in terms of theory and evidence [23]. Qualitative studies are therefore recommended as an essential component of the evaluation of non-pharmacological, so-called ‘complex’ interventions with the aim of supplementing quantitative measures. They help to explain why and how an intervention ‘works’, or fails to do so, from the perspective of participants, thus contributing to the design and wider implementation of healthcare interventions [24–26]. The present study therefore aimed to provide an in-depth account of: (i) participants’ perceptions of what they valued and any negative aspects of the intervention and (ii) whether and in what ways participants continued to make use of the training received.

**The intervention**

We adapted the German Modular Service Package Epilepsy (MOSES) course for English speakers [8,20,21] to form the basis of the UK course called ‘Self-Management education for adults with poorly controlled epilepsy’ [SMILE (UK)]. The course is purposefully interactive, recognizing that knowledge is necessary but not sufficient for behavioural change [23]. Therefore, it aims to promote participants as ‘experts’ and to enable them to gain self-confidence [8]. The course includes a facilitator’s manual and a participant’s manual handed out at the start of the course. The nine chapters in the manuals match the nine modules in the course (Table 1). The UK course facilitators were Nurse Specialists and electroencephalography technicians who were trained by the German developers of MOSES. The courses ran on two consecutive days at an education centre adjacent to a hospital. Two facilitators ran groups with 6–12 participants, and learning was interactive, with feelings and self-esteem discussed, as well as facts about the prevalence of epilepsy, triggers, structured diaries and medication management. Participants began most modules by putting stickers on a flip-chart, representing their position on a spectrum of feelings, attitudes and behaviours (Fig. 1). Facilitators then encouraged participants to ask questions, and to share and compare their experience and coping strategies. The feasibility and acceptability of the course in the UK was initially tested in an external pilot with members of a national user group as volunteers [27].

**Table 1 Course modules**

<table>
<thead>
<tr>
<th>Title</th>
<th>Description of contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Living with epilepsy</td>
<td>How to recognize and express different emotions that you may experience because of epilepsy How to develop better ways to cope with epilepsy</td>
</tr>
<tr>
<td>2. PWE</td>
<td>How common is epilepsy in the UK? When are you most likely to develop epilepsy? Famous PWE and what they have achieved</td>
</tr>
<tr>
<td>3. Basic knowledge</td>
<td>The causes of epileptic seizures, how seizures can develop and how to identify different seizure types</td>
</tr>
<tr>
<td>4. Diagnosis</td>
<td>How to observe and describe seizures accurately Understanding different diagnostic methods How to document seizures and the results of investigations</td>
</tr>
<tr>
<td>5. Treatment</td>
<td>An overview of the most common AEDs and different treatment options How to actively participate in your treatment</td>
</tr>
<tr>
<td>6. Self-control</td>
<td>How to avoid seizure triggers and be aware of auras/warnings Working out what might be relevant to developing methods of self-control</td>
</tr>
<tr>
<td>7. Prognosis</td>
<td>The chances of achieving seizure freedom and staying seizure-free after stopping AEDs Options if seizure freedom is not achieved</td>
</tr>
<tr>
<td>8. Personal and social life</td>
<td>How to improve self-esteem and social contacts Support for independent living, sports and professional life Driving regulations for PWE How to explain epilepsy to others</td>
</tr>
<tr>
<td>9. Network epilepsy</td>
<td>Addresses and other information related to treatment, psychosocial support and information specific for your epilepsy</td>
</tr>
</tbody>
</table>

AED, antiepileptic drug; PWE, people with epilepsy.
Methods

The study was approved by the NRES Committee London – Fulham (reference number 12/LO/1962; Current Controlled Trials: ISRCTN57937389). Informed consent was obtained from all study participants.

Inclusion/exclusion criteria and recruitment

Inclusion criteria for the randomized controlled trial (RCT), and thus for participants in this nested qualitative study, were: adults aged ≥16 years, having a documented diagnosis of epilepsy, currently prescribed antiepilepsy drugs, having reported ≥2 seizures in the previous year and able to provide informed consent, participate in workshops and complete questionnaires in English. Exclusion criteria were actual/suspected psychogenic, non-epileptic seizures only, active symptomatic seizures related to acute neurological illness or substance misuse, severe psychiatric disorder (e.g. psychosis), terminal cancer or being enrolled in other epilepsy-related non-pharmacological treatment studies. Epilepsy specialists invited patients attending clinics in the previous year.

Nested qualitative methods

Participants were purposely selected from the 404 RCT participants to represent differences in gender, age, ethnicity and frequency of seizures as recorded prior to the intervention (L. Ridsdale, G. Wojewodka, E. Robinson, et al, Submitted). Interviews took place at locations that were mutually agreed between the researchers and participants, including public places, such as cafés, as well as participants’ homes. Topics had been generated with service users and the topic guide was piloted (Table 2). Topics included views of participants taking part in the courses, their perceptions of things they valued and found of particular benefit and any negative aspects as well as any factors that encouraged or hindered their participation, and whether and in what ways they had continued to make use of the training.

Analysis

The interviews were audio-recorded and transcribed. The analysis proceeded alongside data collection and was based on a framework approach [28]. This is suitable for small numbers of cases and ensures that each case is fully taken into account in the analysis. This analytic approach requires identification of initial themes that are then grouped into a main theme and subthemes. This is applied to the raw transcript data for each interview. A thematic ‘chart’ is then created that summarizes information for each theme, which allows cross-case and within-case analysis through a process of constant comparison, with particular attention paid to deviant cases. Two members of the research team participated in all data analysis to reduce bias in the identification and interpretation of themes and categories.
Results

Of 24 participants approached within 6 months of course participation, 20 were interviewed. Two were unable to attend for interview and two could not remember the course at all. Participants’ mean age was 44 years, 10 were men and 17 were White. They had received an epilepsy diagnosis a median of 20 years previously and 15 had ≥ 10 seizures in the previous year (Table 3).

Perceived benefits

Overcoming a sense of isolation

Thirteen participants described the benefit of meeting other people with experience of epilepsy, and explained that they had previously felt ‘alone’. A typical comment was:

“Nobody without epilepsy can really understand what it’s like to have a seizure… To see how they [other course members] deal with it makes it more easy to live with your illness because you think I am not alone” (male, 39 years).

Participants also spoke positively about learning about the frequency of epilepsy:

“I learnt about the amount of people that suffered from epilepsy in the UK and in London, and the famous people that apparently suffer from it” (male, 41 years).

Being able to ask questions, share stories, feelings and experience

Another advantage described by 13 participants was the learning method used by course facilitators, as this allowed participants to ask questions, share their stories and open up about their negative feelings. One said:

“(…) it was not a sort of ‘sit down, shut up, and they carry on with a lecture’ sort of thing, we could ask questions” (female, 51 years).

Another added:

“I felt that I wanted to discuss my story… When I said it out loud, it was a way of admitting how bad I have been over the years” (female, 51 years).

Views about the course

“(...) it was not a sort of ‘sit down, shut up, and they carry on with a lecture’ sort of thing, we could ask questions” (female, 51 years).

Another added:

“I felt like I was the only one dealing with it really, and it was getting me down… But when I heard that other people have got it, and I met the other people who have got it, I kind of changed my mind… I look at it in a different way” (male, 47 years).

This led to some becoming more comfortable and confident. One said:
“I am a bit more comfortable now from just talking about it with a class full of other people who are going through similar types of experience” (male, 58 years).

Participants also developed their own ability and confidence as they contributed to others in the group: “(...) to give advice to whoever is still in the confused world of ‘Oh why me, I don’t deserve epilepsy’... They gave us a chance to kind of help” (female, 32 years).

Comparing different attitudes and experience
Course facilitators asked questions about participants’ attitudes and practice during each module, and participants indicated their position by placing stickers on a board (Fig. 1). This identified a spectrum of responses that gave the opportunity for discussion about variations in views and experiences within the group. Thirteen participants reported that the process of comparing similarities and differences was helpful. Some were more reassured by becoming aware that others were coping with greater problems:

“Once you realize there’s people there that are a hell of a lot worse off than you and have got a lot bigger problems. That’s really selfish, but it sort of makes you say well, actually, do you know what? It’s what a lot of other people deal with, you know” (male, 38 years).

Participants were quick to add that they were not glad that anyone suffered more than them, but it did make them feel like their situation was not so bad, and this was seen as a positive. One said:

“So in a way I’m lucky. I have to look at other people that are worse, because it makes me feel better... I thought people had it less than me. I didn’t know people had it more frequently. I thought I was the one that had it the worst, the most frequent, and I was thinking negatively about it... I feel better about it now, not so sad” (female, 52 years).

Another participant described a process of internal change:

“Once you place a sticker on the line I think you start touching the person’s feelings... it pushes you back to yourself. And you come out thinking yeah... It can reverse a person from the inside” (female, 32 years).

Comparisons triggering change in self-management
All of the participants were seeing epilepsy specialists, but their contact was mainly restricted to drug

### Table 3
Demographic and socioeconomic data of people with epilepsy who were interviewed

<table>
<thead>
<tr>
<th>No.</th>
<th>Age (years)</th>
<th>Sex</th>
<th>Ethnicity</th>
<th>Highest qualification</th>
<th>Employment status</th>
<th>Living arrangements</th>
<th>Length of time since diagnosis (years)</th>
<th>Seizure frequency in last 12 months [25]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>32</td>
<td>F</td>
<td>Other Black African/Caribbean</td>
<td>A Level</td>
<td>Unemployed</td>
<td>Lives alone</td>
<td>10</td>
<td>4–5</td>
</tr>
<tr>
<td>2</td>
<td>81</td>
<td>F</td>
<td>White</td>
<td>G.C.S.E.</td>
<td>Retired (due to age)</td>
<td>Lives alone</td>
<td>24</td>
<td>≥10</td>
</tr>
<tr>
<td>3</td>
<td>46</td>
<td>M</td>
<td>Mixed White and Black Caribbean</td>
<td>G.C.S.E.</td>
<td>Unemployed</td>
<td>Lives alone</td>
<td>19</td>
<td>4–5</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
<td>M</td>
<td>Mixed White and Black Caribbean</td>
<td>None</td>
<td>Unemployed (due to health)</td>
<td>Lives with others</td>
<td>20</td>
<td>≥10</td>
</tr>
<tr>
<td>5</td>
<td>41</td>
<td>M</td>
<td>White</td>
<td>B.Sc.</td>
<td>Unemployed</td>
<td>Lives with others</td>
<td>29</td>
<td>≥10</td>
</tr>
<tr>
<td>6</td>
<td>38</td>
<td>M</td>
<td>White</td>
<td>Diploma</td>
<td>Self-employed</td>
<td>Lives with others</td>
<td>4</td>
<td>≥10</td>
</tr>
<tr>
<td>7</td>
<td>36</td>
<td>F</td>
<td>White</td>
<td>NVQ Level 3</td>
<td>Unemployed (due to physical disability)</td>
<td>Lives with others</td>
<td>35</td>
<td>≥10</td>
</tr>
<tr>
<td>8</td>
<td>59</td>
<td>M</td>
<td>White</td>
<td>None</td>
<td>Unemployed (due to health)</td>
<td>Lives with others</td>
<td>3</td>
<td>≥10</td>
</tr>
<tr>
<td>9</td>
<td>52</td>
<td>F</td>
<td>White</td>
<td>None</td>
<td>Unemployed</td>
<td>Lives with others</td>
<td>49</td>
<td>≥10</td>
</tr>
<tr>
<td>10</td>
<td>65</td>
<td>F</td>
<td>White</td>
<td>Diploma</td>
<td>Retired (due to health)</td>
<td>Lives alone</td>
<td>46</td>
<td>≥10</td>
</tr>
<tr>
<td>11</td>
<td>55</td>
<td>M</td>
<td>White</td>
<td>None</td>
<td>Unemployed (due to health)</td>
<td>Lives with others</td>
<td>2</td>
<td>≥10</td>
</tr>
<tr>
<td>12</td>
<td>54</td>
<td>F</td>
<td>White</td>
<td>G.C.S.E</td>
<td>Unemployed</td>
<td>Lives with others</td>
<td>33</td>
<td>≥10</td>
</tr>
<tr>
<td>13</td>
<td>27</td>
<td>F</td>
<td>White</td>
<td>G.C.S.E</td>
<td>Employed (part-time)</td>
<td>Lives with others</td>
<td>16</td>
<td>≥10</td>
</tr>
<tr>
<td>14</td>
<td>51</td>
<td>F</td>
<td>White</td>
<td>G.C.S.E</td>
<td>Unemployed</td>
<td>Lives with others</td>
<td>40</td>
<td>1–3</td>
</tr>
<tr>
<td>15</td>
<td>39</td>
<td>M</td>
<td>White</td>
<td>B.Sc.</td>
<td>Employed</td>
<td>Lives alone</td>
<td>13</td>
<td>≥10</td>
</tr>
<tr>
<td>16</td>
<td>22</td>
<td>F</td>
<td>White</td>
<td>A Level</td>
<td>Unemployed</td>
<td>Lives with others</td>
<td>6</td>
<td>1–3</td>
</tr>
<tr>
<td>17</td>
<td>38</td>
<td>M</td>
<td>White</td>
<td>B Tech</td>
<td>Employed</td>
<td>Lives with others</td>
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<td>1–3</td>
</tr>
<tr>
<td>18</td>
<td>54</td>
<td>F</td>
<td>White</td>
<td>Diploma</td>
<td>Unemployed</td>
<td>Lives with others</td>
<td>43</td>
<td>≥10</td>
</tr>
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<td>19</td>
<td>38</td>
<td>M</td>
<td>White</td>
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<td>≥10</td>
</tr>
</tbody>
</table>
management. Following the course, 12 participants reported managing themselves differently, nine reported that they recognized triggers and warning signs better, so as to reduce their risks, four cut down on alcohol intake, and two learned not to fill the bath too high and to make sure that someone else was around when taking a bath. Five participants reported improved record keeping of their seizures and five improved their medication adherence, some using aids:

“I’ve picked a few tips up by listening to other people. I’ve got a box, you know, one of those boxes with the Monday, Tuesday, Wednesday on it... I actually got it after the course. Somebody was talking about it... The programme has helped me to understand more about epilepsy and medication. I take my treatment more seriously now” (male, 39 years).

Becoming more open outside the group
Almost half (eight) said that having the opportunity to compare their experiences of living with epilepsy within the group enabled them to be more open and talk more freely about epilepsy later on.

“I have never talked about epilepsy to anybody other than the doctor. I’ve never really had a general conversation about it... I suppose I am a bit more comfortable with it now through just talking with a class full of other people who are going through similar types of experiences” (male, 58 years).

Nine participants had read the workbook during and/or after the course, and four of these had lent it or photocopied pages for family or friends. Sharing knowledge of epilepsy with others helped them to feel like ‘experts’. A few said they felt more open with their neurologist and empowered in decision-taking on their medication.

Nineteen participants said that they would recommend the course to others, with a few adding it would also be particularly useful for those with newly diagnosed epilepsy or for people younger than themselves.

Limitations of a group course and potential future improvements
Despite entry criteria designed to exclude those whose language or learning abilities were insufficient, three participants reported that they frequently did not have the ability or English language skills to fully understand what was said and/or the group exercises, four reported memory challenges that made them forget parts of the course and/or forget to do things in real life, and two were not interviewed because they could not remember the course. Thus, nine out of 22 people approached for interviews (about 40%) experienced language or memory problems, which limited the impact of the group course. Five found the course either started too early or went on too long. Suggestions included breaking down the 2-day course into shorter sessions and/or running it over 3 days, although not everyone agreed with this. Another suggestion was that the course should be offered to people younger than themselves or those with new-onset epilepsy.

Discussion
We recruited participants attending epilepsy clinics who responded to the doctor’s invitation to a trial of a structured, expert-led course, facilitated in groups. The characteristics of the nested group were similar to the participants recruited to the trial at baseline in relation to age, gender, ethnicity, time since diagnosis and seizure frequency (Table 3). Participants valued the course particularly for helping them overcome a sense of isolation by meeting other people like themselves. Interactive learning methods enabled them to discuss their mostly negative feelings, and compare their attitudes and practice in a room with other people with experience of epilepsy. Many participants reassessed and changed specific aspects of their self-management.

Strengths and weaknesses of this evaluation
This is the first study to report in-depth interviews with people with persistent seizures about their experience of learning to self-manage epilepsy in groups, with participants recruited from patients attending epilepsy clinics. In this study, nested within an RCT, the number interviewed was small, but in line with guidelines on qualitative methods that focus on eliciting detailed views [29]. New evidence emerged about how the group learning method, in which facilitators encouraged sharing of feelings and comparison of attitudes and practice, met participants’ unmet needs for social peer support, and can promote behaviour change. Such evidence may explain why and how different courses vary in their effect on participants’ attitudes and behaviour. A potential weakness of the evaluation is that it taps into perceptions of PWE in the short-term of up to 6 months post-intervention. Even with this short interval six participants reported memory problems. Three had language problems that reduced their understanding in a group course. Baseline one-to-one assessments during the consenting process had not identified that group discussion requires greater language proficiency.
Interpretation of results

Our evidence suggests that participants valued facilitated, interactive learning that allowed them to share their stories and feelings with others who were experiencing and managing epilepsy. This group process reduced their sense of isolation, and increased their self-acceptance and confidence. In other stigmatized conditions, it has been shown that social contact and first-person narratives help reduce self-stigma [30–32], and increase self-confidence. Self-confidence is posited as a key prerequisite for people to initiate and maintain changes in their self-management behaviour [5,32].

For some participants, insufficient understanding of English was a barrier to learning in a group. It may be that one-to-one advice would be better understood. For several others, their recall of what they learned was impaired, and memory problems have been well-described in epilepsy [33]. This is particularly likely in those with persistent seizures, who may require ways to reinforce their learning and practice over time.

Implications for clinical practice and research

Clinicians work one-to-one and focus on medication management. This does not help PWE to overcome social isolation, improve their self-confidence and learn about self-management by talking with other people who have similar experience, in a supportive and safe space. This can be redressed by group interactive courses. In this study, physicians invited participants to a course that would be led by healthcare staff. There is heterogeneity in the courses described so far in the design and outcome measures used to test them [8–10,34]. This is a first attempt to understand the process of why and how group epilepsy self-management education works, or fails to do so, from the patients’ perspective. From the point of view of PWE with persistent seizures, participating in expert-facilitated interactive groups provided social support and the opportunity to express negative emotions. This reduced their sense of isolation and improved their confidence to talk about their condition.

In future, group interventions could be developed and tested specifically to prevent isolation and loss of confidence, early after diagnosis, as has been done in other chronic and stigmatized conditions [30–32]. Epilepsy courses could also be evaluated in the UK for a mixture of all PWE as in Germany [8].

We know that this interactive course was appreciated by participants in terms of social and emotional support. However, participants had had epilepsy for a median of 18 years, with persistent seizures, and language or memory problems affected over 40%. In this context, an increase in confidence and reported behaviour change may or may not translate into measurable benefit in the medium term. Interventions that are further integrated with usual primary and secondary care, and reinforced by nurses or pharmacists over time, are more expensive and complicated to evaluate. However, there is evidence that they are likely to be more effective in promoting self-management in the medium term [5,35,36]. Although integrated monitoring and advice are important in all chronic conditions, this may be particularly important for chronic epilepsy that is difficult to control.

Acknowledgements

We thank Dieter Dennig, Margarete Pfafflin, Rupprecht Thorbecke, Franz Brunnhuber, Devi Amin, Tony Hollands, Cathy Queally, Sally-Ann Remnant, Jennifer Nightingale, Peter Muthiniji, Lee Drummond, Nancy Richardson, Telma Neves, Sandra Chinyere, Marisa Pina, Gabriella Wojewodka, Carly Pearson, Laura Goldstein, Stephanie Taylor, Angela Pullen, Epilepsy Action and our participants. This research was independent and funded by the National Institute for Health Research [Health Technology Assessment, 09/165/01 – Self-Management education for adults with poorly controlled epilepsy (SMILE) A Randomized Controlled Trial]. The views expressed in this publication are those of the authors and not necessarily those of the National Health Service, National Institute for Health Research or Department of Health. Course facilitators were funded by King’s College Hospital National Health Service Foundation Trust.

Disclosure of conflicts of interest

Printing costs of the course manual were funded by Sanofi UK, which had no influence on content. The authors declare no financial or other conflicts of interest.

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