**Abstract**

**Aim** To reduce the incidence of self-harming behaviour and improve well-being and experience of care for individuals who present regularly to the emergency department in one hospital following self-harm, by providing outpatient care.

**Method** This was a 12-month nurse-led practice development project to develop, implement and evaluate a brief-intervention outpatient service for individuals who presented to the emergency department following self-harm and who were identified as being at risk of further self-harm. The service improvement was informed by an action research process and the principles of appreciative inquiry.

**Findings** The project provided a short-term outpatient follow-up service, known as Brief Interventions in Repeat Self Harm (BIRSH), to patients who presented to the emergency department following self-harm, and who were considered at risk of further self-harm. The intervention enabled the clinician to validate the patient’s distress and offer them short-term outpatient follow-up care. The BIRSH sessions were offered to 38 patients. A total of 26 patients attended one or more BIRSH session, and all of these individuals showed a reduction in the number of presentations to the emergency department following self-harm in the six months following the intervention, compared to the six months before the intervention.

**Conclusion** The BIRSH outpatient service appears to have been a contributory factor in reducing self-harm for patients who engaged with the service. The service improvement was informed by an action research process and the principles of appreciative inquiry, which provided a positive, focused approach to the practice development project.

**Keywords**

action research, appreciative inquiry, mental health, outpatient care, psychiatric liaison, research, self-harm, service improvement

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**THE EMERGENCY DEPARTMENT**

psychiatric liaison service at the John Radcliffe Hospital in Oxford assesses all patients presenting with mental health concerns, including self-harm. Patients are then directed or referred to statutory or voluntary agencies for ongoing support and interventions. The self-harm team are part of the psychiatric liaison service, and are a nurse-led team comprised of six mental health nurses. The team offers psychosocial assessment to people aged between 13 and 65 years who attend the emergency department following self-harm. Self-harm is defined as intentional self-poisoning or self-injury, irrespective of the motive or the extent of suicidal intent (Hawton et al 2000, National Institute for Health and Care Excellence (NICE) 2011).

In 2013, 24% of patients presented to the emergency department at John Radcliffe Hospital with repeat self-harm within one year of a self-harm episode (Centre for Suicide Research 2014). This population has a high level of psychological morbidity (Guthrie et al 2001) and they are a high-risk
The service improvement project was supported by the Foundation of Nursing Studies Practice Based Development and Research Programme in partnership with the General Nursing Council for England and Wales Trust.

Aim
To reduce the incidence of self-harming behaviour and improve well-being and experience of care for individuals who present regularly to the emergency department in one hospital following self-harm, by providing outpatient care.

It was anticipated that the project would achieve the following aims:

» Improved patient experience for those presenting to the emergency department following self-harm.

» Reduced costs associated with reductions in bed use by the emergency department, use of the crisis team, and psychosocial assessments of repeat attendees. Individuals who repeatedly self-harm place a cost burden on healthcare services (Sinclair et al 2010).

» Development of the self-harm team’s skills and improved job satisfaction.

Method
The practice development project was informed by an action research process. Carr and Kemmis (1986) stated that action research is a ‘form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out’. The critical perspective of this approach was appropriate for the self-harm team.

The behaviours of, and lack of adequate care provision for, this patient group can raise challenges for healthcare staff, often leading to negative attitudes, which might adversely affect care (Saunders et al 2012). This can result in patients feeling, or being, alienated from care, further hindering their engagement with healthcare services and potentially exacerbating the psychological, emotional and interpersonal challenges that resulted in their self-harming behaviour in the first instance.

Some individuals who regularly presented to the emergency department following self-harm described feelings of alienation and expressed feeling let down and uncared for by staff in the emergency department and in mental health services. The self-harm team reflected critically on this feedback and their feelings about working with this patient group. Team members realised they were experiencing a sense of ineffectiveness as a result of providing repeated assessments that seemed to have limited benefit, and felt helpless because they had no further care to offer.

This reflection led to the team trialling an outpatient intervention with one service user who was presenting to the emergency department and using mental health crisis teams and emergency services following self-harm with increasing frequency. The self-harm team members were aware of the importance of open, trusting, positive, consistent and reliable relationships with this patient group (NICE 2009, 2011), and felt that if they could use the therapeutic relationship to support this patient manage and reduce her self-harming behaviour, she would feel increasingly stable, her presentations to emergency and crisis services would decrease and staff would feel less helpless. The outcome of this intervention was as the team had expected: the patient reduced her use of emergency and crisis services as a result of feeling validated, supported and stabilised.

The self-harm team members decided to build on this experience and pilot a brief outpatient follow-up service to be offered to individuals with similar presentations, who were not receiving formal psychological interventions from other services. It was agreed the team would pilot the service for one year, as a practice development project. This project was supported the Foundation of Nursing Studies Practice Based Development and Research Programme in partnership with the General Nursing Council for England and Wales Trust.

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members, given the processes of reflection and emancipatory action they were using informally, and supported the development of the formal practice development project.

The self-harm team used Williamson et al’s (2012) action research cycle to provide structure to the project, comprising six phases:
1. Reflecting on a theme.
2. Planning action.
3. Taking action to change practice.
4. Observing and evaluating.
5. Reflecting again.
6. Planning further action.

The team convened a steering group of partners in care, which included healthcare experts and individuals with lived experience, to provide governance and guide those involved in the project through the phases of the action research cycle. Ethical approval was not required for this practice development project, and patient confidentiality was maintained in line with trust policy.

Findings

Phase 1 – reflecting on a theme

Action research generally starts by identifying an issue (Bryman 2012). The issues identified from patient and staff feedback that led to the project were the unmet needs of patients who presented to the emergency department following self-harm, and the self-harm team’s feelings of ineffectiveness and helplessness in relation to the care of this patient group. However, the self-harm team members were also developing the project based on the positive experience of testing a new approach with one patient, and wanted to build on this experience in the project.

The principles of appreciative inquiry were incorporated into the first phase of the action research cycle through the collection of positive narratives. Appreciative inquiry begins the improvement process by examining and increasing aspects of practice that are effective, rather than by starting with an issue (Cooperrider and Whitney 2005). Various partners in care were asked to share positive narratives about the care provided by the self-harm team. The self-harm team intended to use these narratives to generate ideas for developing the outpatient self-harm service, enabling the service to address the issues already identified, and build on the most effective aspects of care it provided. Seven narratives were collected from staff members, patients and nursing students. The predominant themes identified were: positive engagement, time to talk, validation and feeling heard.

A retrospective audit of patients’ case notes was undertaken to determine the incidence of repeat self-harm presentations to the emergency department and to identify common issues leading to repeat presentations. This data would inform the inclusion criteria for selecting patients for outpatient follow-up and the practice guidance for healthcare staff undertaking the intervention. The notes of patients who had presented with self-harm to the emergency department more than once over the previous six months were reviewed (n=18). The number of presentations for each patient varied from two to 16. The main issues that precipitated self-harm and subsequent presentation to the emergency department were: low problem-solving ability, alcohol and drug misuse, issues with anger management, low mood and depression.

Phase 2 – planning action

The first phase of the action research cycle enabled the self-harm team members to define the intervention they wanted to offer. They agreed that the intervention should be short-term outpatient follow-up, focusing on problem-solving, with the aim of managing and reducing self-harming behaviour and establishing alternative coping strategies. A problem-solving approach was selected, because the need for this type of approach was identified from the retrospective audit of patients’ case notes, and it is among the most effective interventions for self-harm (Hawton et al 2000, Townsend et al 2001). The timeliness of outpatient follow-up interventions was important because repeat self-harm tends to occur soon after the first episode of self-harm (Kapur et al 2006).

It was agreed that the inclusion criteria for outpatient follow-up would be: individuals who had presented to the
emergency department following self-harm at least three times in the previous 12 months, or five or more times in the preceding 24 months. Patients who were already engaged with psychological or specialist mental health services would not be offered outpatient follow-up, but would be referred to the relevant team. Patients who met the inclusion criteria but were under the care of a community mental health team would be discussed with their care co-ordinator to determine whether or not outpatient follow-up was appropriate.

Research evidence, clinical guidance, narratives and reflections were reviewed to establish the structure of the service. An operational policy was devised that aligned with relevant trust policies, such as risk assessment and management, and non-attendance.

The outpatient follow-up service was named Brief Interventions in Repeat Self Harm (BIRSH). The main principles of the service are outlined in Box 1.

**Phases 3, 4, 5 and 6 – taking action to change practice, observing and evaluating, reflecting again and planning further action**

The BIRSH service commenced in September 2013, and closely followed the criteria in Box 1. An emphasis on reflection was central to the initiative, instigating ‘tiny cycles’ of ongoing change in the overall practice development project (Wadsworth 1998). This enabled the self-harm team to develop the BIRSH service as it was becoming established, rather than waiting for a final evaluation to identify necessary changes.

**Tiny cycle 1 – format of sessions**

Early in the project, supervision and team dialogue identified that sessions might be more therapeutic if patients identified the areas they find challenging themselves, and decided what they wanted to achieve from the sessions, rather than following the predetermined core sessions identified in the planning action phase. The self-harm team members would continue to access the guidance and resources they had devised, but these would be used to support rather than dictate the content of sessions.

This change to the content of sessions did not detract from the value of the therapeutic relationship, which was central to the intervention. It enabled the self-harm team members to feel able to practise according to their individual styles. It also provided them with opportunities to learn from each other through supervision, and to attempt new approaches based on their different experiences.

In practice, patients generally identified the same needs as those anticipated by the self-harm team, for example reduction in self-harming behaviours or developing their ability to get through the day. However, from a readiness-to-change perspective, if the issues and desired outcomes were identified by the patient, their motivation to work on these issues was likely to be greater, collaboration stronger, and a sense of self-efficacy more achievable (Prochaska and DiClemente 1983). One member of the self-harm team described an example of an intervention focusing on understanding and reducing self-harm, which was an area that most patients wanted to work on:

‘I worked on a self-harm timeline with patients I saw, starting with thinking about their last instance of self-harm and mapping it out visually. By focusing upon the physical actions, antecedents, environment and the emotions experienced

**BOX 1. Main principles of the Brief Interventions in Repeat Self Harm (BIRSH) service**

- The BIRSH service would be offered to patients following a psychosocial assessment, and undertaken by the assessing clinician, who would be one of the mental health nurses in the self-harm team. This would maximise engagement by offering continuity of the therapeutic relationship
- Six 45-minute sessions would be offered over 12 weeks with dates, times and boundaries agreed at the first session
- Patients would be offered three to four ‘core sessions’, focused on self-harm reduction, harm minimisation, problem-solving and developing alternative coping strategies, followed by:
  - Two to three specific sessions based on the particular needs of the patient concerned, for example alcohol use, understanding emotions, and bereavement
  - Self-harm prevention would be central to all sessions. This would include improving understanding of self-harm, exploring alternatives to self-harm, using sources of support, and safety and crisis planning
  - Guidelines were devised for the core sessions and resources were identified for use in the problem-specific sessions
- BIRSH clinicians would receive monthly group supervision to discuss cases and share learning, and bi-monthly specialist supervision to focus on challenging dynamics and bringing the series of sessions to an end, without the patient feeling abandoned

**KEY POINT**

Appreciative inquiry begins the improvement process by examining and increasing aspects of practice that are effective, rather than by starting with an issue (Cooperrider and Whitney 2005)
throughout, the patient derived an understanding of triggers, behaviours and emotions that lead up to and followed self-harm. From this, it became possible to consider alternative ways of coping’ (Self-harm team member 1).

Tiny cycle 2 – inclusion criteria
The self-harm team members found that they had offered the BIRSH service to most of the individuals who regularly attended the emergency department with self-harm in a timely manner. The uptake of the BIRSH service by this initial cohort was low; in the first month, only one out of five people attended their appointment. The team had anticipated this to some degree, since non-attendance is a recognised challenge when working with this patient group (Guthrie et al 2001). However, the combination of low numbers and limited uptake meant that the self-harm team members had excess capacity for outpatient work.

This led to the team members reflecting on the inclusion criteria for the service. They discussed the evidence that any repeat self-harm is most likely to occur in the year following the first episode of self-harm (Kapur et al 2006). In line with the preventative ethos of the BIRSH service, the self-harm team members decided to offer the intervention to patients presenting to the emergency department with a first episode of self-harm who they assessed to be at risk of repeat self-harm, rather than only those who had a history of repeat self-harm.

Tiny cycle 3 – non-attendance
There was a consensus among the self-harm team and the partners in care steering group at the outset of the BIRSH service that individuals who did not attend appointments were making the decision not to engage with the service, and that they should not be offered further appointments. In practice, the self-harm team felt uncomfortable with this assumption and felt it was important to keep the option to attend BIRSH sessions open for previous non-attenders, enabling them to move through the necessary stages of readiness-to-change at their own pace. As a result, the team agreed to repeat the offer of BIRSH sessions to those who had not attended previous appointments, where the intervention was still considered appropriate. Some individuals started to attend the sessions after the second or third offer.

Tiny cycle 4 – number of sessions
The self-harm team had agreed at the outset of the BIRSH service to offer six sessions to all individuals. In practice, many individuals did not want to engage in all six sessions and some stopped attending. However, it was clear from the feedback and evaluation that most individuals benefitted to some extent from the intervention. Other interventions have provided fewer than six sessions, for example Guthrie et al (2001) offered four sessions. Therefore, the team felt it was possible to reduce the number of BIRSH sessions offered. To ensure flexibility, the team agreed to offer three sessions to all individuals, with a view to offering up to three more sessions, where clinically indicated.

Formal evaluation
In the 12 months of the BIRSH service pilot project, 38 patients were offered the intervention, of which 26 (68%) patients attended one session or more. Five (19%) patients offered the BIRSH service attended all six sessions. The mean number of sessions attended was 2.45.

Various measures, as shown in Table 1, were used to evaluate the BIRSH service to ascertain if the intervention had been effective in reducing the number of self-harm presentations to the emergency department, as well as improving the mood and well-being of these patients (Table 1).

Mood and well-being
Fourteen patients (14/38, 37%) attended two or more BIRSH sessions. Of these, 11/14 (78%) patients had a reduction in their Beck Depression Inventory (BDI) score, with a mean reduction of 27%, indicating an improvement in low mood. In the three individuals whose low mood had not improved, the BDI score remained unchanged in one individual, and increased by one point (3%) in the other two individuals. The reduction in BDI score

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was greatest for the five individuals who attended all six sessions (mean reduction of 50%), suggesting that the more sessions attended by an individual, the greater the benefit to them.

The Warwick-Edinburgh Mental Well-Being Scale (Tennant et al 2007) and the Self-Concept Scale (Robson 1989) were only undertaken with those who attended the first and final sessions (n=5). Data were not available for one patient, therefore it was only possible to review these measures with four patients. Table 2 summarises the changes in mood and well-being scores for patients who attended all six BIRSH sessions.

**Reduction in presentations to the emergency department following self-harm**

All the patients who attended one or more BIRSH session had a reduction in the number of emergency department presentations following self-harm in the six months after completing the intervention, compared with the six months before attending the BIRSH sessions. Figure 1 shows the mean number of presentations per patient to the emergency department with self-harm; this was 3.5 presentations in the six months before the start of the intervention, and 0.75 presentations in the six months following completion of the intervention. These figures were calculated using 23 patients, because patients who were in a psychiatric hospital or prison services were excluded.

There were a total of 81 presentations to the emergency department in the six months before the start of patients’ attendance at the BIRSH sessions, compared with 17 presentations in the six months after patients completed the BIRSH sessions; a reduction of 79% in presentations to the emergency department. There did not appear to be a correlation between the number of BIRSH sessions attended by patients and the extent to which the emergency department presentations were reduced.

**Self-harm between sessions**

At each BIRSH session, patients were asked to report the frequency of their self-harm thoughts and behaviours

### TABLE 1. Measurement tools to evaluate the Brief Interventions in Repeat Self Harm (BIRSH) service

<table>
<thead>
<tr>
<th>Measurement tool</th>
<th>Description</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beck Depression Inventory (Beck et al 1961)</td>
<td>Measures the severity of depressive features using 21 self-report multiple choice questions. A high score indicates severe depression</td>
<td>At the beginning of every BIRSH session</td>
</tr>
<tr>
<td>Warwick-Edinburgh Mental Well-Being Scale (Tennant et al 2007)</td>
<td>Measures mental well-being using a 14-item self-report questionnaire, with a five-point Likert scale for response categories. A high score indicates positive well-being</td>
<td>At the first and last BIRSH sessions</td>
</tr>
<tr>
<td>Self-Concept Scale (Robson 1989)</td>
<td>Measures self-concept using an eight-item self-report questionnaire, with a four-point Likert scale for response categories. A high score indicates positive self-concept</td>
<td>At the first and last BIRSH sessions</td>
</tr>
<tr>
<td>Self-harm and suicidal thoughts questions</td>
<td>Four specific questions are asked by the clinician about thoughts and acts of self-harm and suicidal behaviour, since the last session. Responses are recorded by the clinician</td>
<td>At every session</td>
</tr>
<tr>
<td>Number of emergency department presentations following self-harm</td>
<td>The number of presentations to the emergency department following self-harm in the six months before starting and after completing the BIRSH sessions are recorded for each individual</td>
<td>Six months following the completion of the BIRSH sessions</td>
</tr>
<tr>
<td>Satisfaction questionnaire</td>
<td>Four questions about the BIRSH service, with a five-point Likert scale for response categories from strongly agree to strongly disagree</td>
<td>On completion of the BIRSH sessions, or sent by post to those who did not attend the final session</td>
</tr>
</tbody>
</table>

### TABLE 2. Changes in mood and well-being scores for patients who attended all six Brief Interventions in Repeat Self Harm sessions

<table>
<thead>
<tr>
<th></th>
<th>Beck Depression Inventory (Beck et al 1961). Reduced score indicates improvement</th>
<th>Warwick-Edinburgh Mental Well-being Scale (Tennant et al 2007). Increased score indicates improvement</th>
<th>Self-Concept Scale (Robson 1989). Increased score indicates improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient 1</td>
<td>-13 (from 37 to 24)</td>
<td>+3 (from 33 to 36)</td>
<td>+3 (from 18 to 21)</td>
</tr>
<tr>
<td>Patient 2</td>
<td>-30 (from 43 to 13)</td>
<td>+8 (from 28 to 36)</td>
<td>+2 (from 22 to 24)</td>
</tr>
<tr>
<td>Patient 3</td>
<td>-22 (from 36 to 14)</td>
<td>+7 (from 33 to 40)</td>
<td>+1 (from 19 to 20)</td>
</tr>
<tr>
<td>Patient 4</td>
<td>-12 (from 35 to 23)</td>
<td>-3 (from 30 to 27)</td>
<td>No change (remained at 23)</td>
</tr>
</tbody>
</table>
experienced since the previous session. All five patients who attended six BIRSH sessions reported a reduction in self-harming behaviour, comparing sessions one and two to sessions five and six. Of the 14 patients who attended two or more sessions, 13 (93%) patients reported a reduction in the frequency of their self-harming thoughts and behaviours, while one patient reported an increase in their thoughts and acts of self-harm.

### Satisfaction

The five patients who attended all sessions completed a satisfaction questionnaire at the final BIRSH session. Everyone who attended one or more session was sent the satisfaction questionnaire and final outcome measures, with a stamped addressed envelope. However, only one questionnaire was returned.

Six individuals (6/38, 16%) completed the satisfaction questionnaire, and one additional narrative was received. Completed questionnaires indicated satisfaction with the BIRSH service, with two individuals reporting it had been the most helpful intervention they had received from mental health services. One comment included:

‘I couldn’t imagine a life away from overdosing, self-harm and depression.’

Figure 1. Mean number of presentations per patient to the emergency department following self-harm

![Graph showing mean number of presentations per patient to the emergency department following self-harm](image)

- Presentations in the six months before starting the Brief Interventions in Repeat Self Harm sessions
- Presentations in the six months after completing the Brief Interventions in Repeat Self Harm sessions

I had no hope for anything... I am able to cope with things I assumed I would never deal with. At my first appointment, I didn’t think anything would help, but [I] forced myself to keep going’ (Attendee 13).

However, most individuals expressed frustration at the number of measurement tools used during the sessions.

### Staff experiences

The self-harm team reflected on its experience of the BIRSH service through a facilitated evaluative forum. The consensus was that the BIRSH service was a positive intervention; staff felt reassured to be able to invite patients for outpatient follow-up after psychosocial assessment, and that it had enabled them to develop their skills. Comments from staff included:

‘[It was] empowering to be able to offer something that probably will reduce self-harm’ (Self-harm team member 2).

‘[It was] good to have something to offer other than referral on to other services. [This] helps with validation and improves the patient journey as they are returning to see their assessor, rather than another clinician’ (Self-harm team member 3).

Although the self-harm team members recognised that the additional work associated with the BIRSH service increases the pressure on them, this was felt to be manageable, because the overall outcome should be to reduce the self-harming behaviour of a patient group that can present challenges to healthcare practitioners.

### Discussion

Despite the small number of participants, evaluation of the pilot study suggests that the BIRSH service contributed to a reduction in the number of presentations to the emergency department following self-harm. There is an indication that the intervention may have contributed to a reduction in self-harming behaviour among those who attend two or more sessions. This reflects findings of other
Although the BIRSH service was solely responsible for the reduction in self-harm, it was not aware if the reduction in self-harm continued beyond the six months following completion of the BIRSH sessions. This was beyond the scope of this small practice development project.

The BIRSH service appeared to improve patients’ mood and well-being, but it was challenging to evaluate whether or not the patients’ experiences of care had improved. This was primarily because few individuals attended all six BIRSH sessions, and only one returned the postal feedback form. It may have been challenging for individuals to decide whether they felt the care they received from the self-harm team had improved, if they had not received care from the team previously. Therefore, a more suitable approach may be to identify evidence of a positive and effective care experience for patients, rather than focusing on improvement.

Satisfaction with, and outcomes of, the BIRSH service may have been influenced by the quality and style of individual therapeutic relationships between the clinicians and patients. This should prompt caution in making generalisations about the effectiveness of the BIRSH service model. However, the therapeutic relationship was central to the ethos of the intervention and the supervision the self-harm team received ensured consistency of the approach, even though the service was developed from the initial aim of standardised core sessions.

From a staff perspective, the BIRSH service has been a positive experience because it has provided an outpatient component to the service provided by the self-harm team. Involving partners in care and members of the self-harm team in the development of the BIRSH service maintained their ownership of, and dedication to, the BIRSH service from the outset.

Service improvement informed by an action research process and the principles of appreciative inquiry provided a positive, focused approach to practice development that the self-harm team found energising and empowering. This is demonstrated by the fact that although the identified project lead changed during the planning phase of the project, and has changed again following evaluation, neither change has resulted in any less of a commitment to the BIRSH service. The self-harm team is continuing to provide the BIRSH service, and intends to undertake ongoing and more formal evaluation of this intervention.

Conclusion

The BIRSH outpatient service appears to have been a contributory factor in reducing self-harm for patients who engaged with the service. Service improvement informed by an action research process and the principles of appreciative inquiry provided a positive, focused approach to the project. This methodology might be a useful way of attracting and sustaining engagement throughout processes of change and improvement. The BIRSH service is considered to be a beneficial intervention for patients and staff, and the service continues to be provided by the self-harm team.

Implications for Practice

» It may be beneficial to offer brief outpatient follow-up to patients following self-harm, since this may improve their well-being and reduce their presentations to the emergency department following self-harm.

» The therapeutic relationship, validation and collaboration are essential aspects in the care of those who self-harm, and should be considered by clinicians and healthcare services.

» Using an approach to service improvement informed by an action research process and appreciative inquiry could be effective in enabling clinicians to improve their practice.

Despite the small number of participants, evaluation of the pilot study suggests that the BIRSH service contributed to a reduction in the number of presentations to the emergency department following self-harm. There is an indication that the intervention may have contributed to a reduction in self-harming behaviour among those who attend two or more sessions.
References


