

Improving the quality of initial management of self harm and suicide patients in A+E at the James Paget Hospital

Ben Cracknell
James Paget University Hospital

Abstract

Our objective was to improve the initial management and documentation of suicide risk assessment in the notes of patients attending A+E with a suicide attempt or self harm.

An initial audit was carried out in 2012 looking at the notes of 50 patients who attended the James Paget Hospital accident and emergency (A+E) department following a suicide attempt or self harm episode. Compliance to the NICE guidelines on the initial management of self harm was assessed and was found to be low in certain areas. A significant number of these patients are discharged without evidence of a satisfactory suicide risk assessment being documented. This is dangerous practice for the patients and puts the doctor at risk medico-legally.

A number of interventions were introduced to raise compliance to the NICE guidelines. These changes included adaptation to the self harm pro-forma to better conform to the NICE guidelines, departmental teaching sessions, and posters of the pro-forma put up in A+E at the doctors stations. In addition, a "see and greet" nurse was involved in the triage and administration of activated charcoal.

The audit was repeated in 2013 and 2014. It was found that the interventions led to an increase in compliance to the NICE guidelines and better documentation in the notes of patients who present with a suicide attempt or self harm episode.

Problem

Suicide is one of the leading causes of death in the 20-34 year old age group (<http://www.ons.gov.uk/ons/rel/vs01/mortality-statistics--deaths-registered-in-england-and-wales--series-dr-/2012/info-causes-of-death.html>).^[1] A+E is a difficult environment for the delicate history that is involved in self harm and suicide, due to time restrictions, a busy environment and a variable level of psychiatric training in the various grades of doctors that work in A+E.

If patients who feel suicidal are not identified and properly assessed for future suicide risk, the potential consequences are further suicide attempts or death. This is an important issue. Many patients with suicidal thoughts have an underlying psychiatric disorder that can be treated or social circumstances that can be helped, so detecting these patients and referring them to mental health makes a difference. NICE provide guidelines on the initial management of self harm in A+E (<https://www.nice.org.uk/guidance/cg16/resources/guidance-selfharm-pdf>), so the audit cycles were aimed at improving the compliance to the guidelines set out by NICE.^[2]

In the James Paget Hospital a scoring system is used to risk stratify these patients; the "SADPERSONS score". Patients are referred to the mental health team for assessment and follow up if they are scored over 6. This score, however, does not fully cover all the areas required to be assessed in the NICE guidelines, and should not be used alone. In addition to the risk posed the patient if they are discharged from A+E without a proper risk assessment, there is

also a risk to the doctor if they are found to have documented an insufficient risk assessment in the notes and then failed to refer the patient to the mental health team.

Background

The consequences of poor initial management of self harm and suicide attempts in A+E can be lack of adequate referral to mental health services leading to loss of follow up or intervention in the patients circumstances, which can in the worst case scenario lead to a successful suicide attempt. NICE guidelines set out on the initial management of self harm include these points:

1. Activated charcoal: this should be offered to patients who attend the ED within 1 hour of an overdose of relevant substances, or within 2 hours if felt to be clinically indicated, based on the substance ingested.
2. Triage in the emergency department: patients should be offered a preliminary psychosocial assessment at triage (or initial assessment) following an act of self-harm. This should include:

- a) Capacity and willingness to accept treatment
- b) Need for physical care
- c) Level of distress of the patient.

1. Further psychosocial assessment: every patient who has self-harmed should have a comprehensive assessment of

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needs and risks, to include:

- a) Social situation
- b) Personal relationships
- c) Recent life events
- d) Psychiatric history
- e) Mental state examination
- f) Motivation for act
- g) Enduring psychological characteristics associated with self-harm.

1. Risk assessment: all people who have self-harmed should be assessed for risk of further self-harm. This should be clearly documented in their notes. Referral for further assessment should be based on the risk assessment.

A proforma was already in place at the time of initial audit which had a brief risk assessment score (see attached file) that guided referrals to the mental health team, however this score does not cover all the points set out by NICE (CG16) on the initial management of self harm.

Baseline measurement

To assess compliance with the NICE guidelines, 50 consecutive sets of A+E notes, from patients attending with a diagnosis of "Psychiatric - overdose" or "Psychiatric - self harm" were reviewed, starting from 01/08/2012 and continuing for up to six months, or until 50 sets of notes were found. Patients who were unconscious and therefore unable to undergo a full psychological assessment were excluded from the audit. Patients under 16 were also excluded as they are all referred to the mental health team regardless of risk stratification.

Data was recorded on the compliance to the NICE guidelines (CG16), and the following questions were asked when looking at the notes (results from the initial audit are also given):

Question 1: Was activated charcoal offered within 1 hour of poisoning, or 2 hours if clinically indicated?

Yes in two patients, not applicable in 48. Compliance rate 100%.

Question 2: Is there documented evidence that the triage assessment includes:

- a) Capacity and willingness to accept treatment: Recorded in four patients, not recorded in 46. Compliance rate 8%
- b) Need for physical care: Yes in 19, no in 31. Compliance rate 38%
- c) Level of distress: Yes in 11, no in 39. Compliance rate 22%.

Question 3: Was there a full assessment of social and psychological needs made?

Yes in seven, no in 43. Compliance rate 14%.

Question 4: Is the patient's future suicide risk (SADPERSONS score) fully assessed and documented?

Yes in 35, no in 15. Compliance rate 70%.

The initial audit carried out in 2012 showed poor compliance to the NICE guidelines in the areas of triage and psychosocial assessment. The compliance of the administration of activated charcoal was high, but the actual administration rate was low.

Compliance to the documentation of the SADPERSONS score was higher than the other guidelines. However, any patient discharged without a proper risk assessment poses a risk to patient safety and is unacceptable.

Design

The 2012 audit confirmed that a significant number of patients attending the A+E in the JPUH following a suicide attempt or self harm did not have recorded evidence of a satisfactory suicide risk assessment.

We noted that the compliance to the SADPERSONS score was relatively high compared to the other guidelines. This implied that a proportion of the A+E doctors were looking at the SADPERSONS proforma to assist them in assessing their patient. We added prompts to the proforma that would act as a checklist to encourage compliance to other points set out in the NICE guidelines such as the triage documentation and psychosocial assessment. Prompts were decided upon based on the NICE guidelines and with input from an A+E consultant who also acts as the mental health A+E lead.

To increase the awareness of the SADPERSONS score, we ensured the inclusion of initial management of self harm into the A+E and junior doctor teaching program, a lecture on treatment of patients who attend with an overdose was already in the annual teaching program, which was adapted to include the SADPERSONS score. We also put the pro-forma up by each of the doctors stations so it could be seen by the clerking doctors.

These changes were put in place and a re-audit was carried out eight months later using the same method that was used in the initial audit to assess improvement.

Strategy

PDSA cycle 1: The triage documentation compliance improved. We received good feedback on the proformas from the junior doctors in A+E. Results were:

Capacity and consent compliance: 70%

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Need for physical care compliance: 76%

Level of distress compliance: 64%.

Documentation of psychosocial assessment also improved to 42%. The improvement of the compliance to these two guidelines suggested good efficacy of prompts we added to the proforma.

The compliance to the documentation of the SADPERSONS score decreased in the re-audit (from 70% to 54%). We investigated why this could be, and upon talking to the staff in the A+E we noted that some staff were using the score to assist their referral but then not documenting the score in the notes. This was also evidenced by a number of patients being referred to the mental health team with no score documented in the notes (20% patients were referred with no SADPERSONS score documented in 2013). The proforma was also moved away from the doctors station by a third party in 2013.

There was a low rate of administration of activated charcoal in the re-audit as well as the initial audit (only two patients of the 50 received activated charcoal in the initial audit and the re-audit). This was mainly a reflection of the late presentation of the patients to A+E. The patients rarely arrived within the two hour limit for the administration of activated charcoal, after which it is ineffective and is not indicated.

PDSA cycle 2:

We moved the proformas back to a more easily accessible place and ensured they were visible to the clerking doctors. The SADPERSONS score continued to be included in the junior doctors teaching sessions, and we adapted the proforma to encourage the documentation of the SADPERSONS score rather than its use as a referral tool alone. The prompts for psychosocial assessment and initial triage assessment documentation were kept on the proforma for the second PDSA cycle.

A see and greet nurse was introduced by the James Paget A+E in 2014. We encouraged the see and greet nurse to document the triage information and administer activated charcoal when indicated, hopefully getting to the patients a little earlier than when they are seen in A+E so that more came under the two hour limit for the administration of activated charcoal. A proforma was also put up in the see and greet room.

Results

We carried out another re-audit eight months later in 2014, based on the same method that we used to gather the data in the last two audits. A series of graphs illustrating the progression of the results through the three audits is attached.

The rate of activated charcoal administration did not increase with the introduction of the see and greet nurse; only one patient received activated charcoal in the 2014 audit. This again mostly reflects late presentation to A+E after an overdose, and cases were activated charcoal cannot be used (such as hanging attempt or self harm with a razor blade). No patient arrived within the two hour limit

but failed to receive the activated charcoal.

Compliance to the recording of triage information improved significantly throughout the audit cycles (illustrated in attached graph). However, the recording of capacity and consent decreased slightly in 2014 compared to 2013. This will be emphasised in future departmental teaching sessions to A+E trainees to drive up this standard. Reported issues were that some staff felt that presenting to A+E and waiting for treatment implied consent.

Documentation of psychosocial history improved greatly in 2013 (from 14% to 42%), but leveled out after the initial improvement (to 46% in 2014). Some attempt at a psychosocial assessment was made in most cases but they were often variable and many did not cover all the points set out in the NICE guidelines. The SADPERSONS proforma has since been modified to contain prompts for a deeper psychosocial assessment that should cover all the points that NICE set out. Overall, the increased compliance shows a good efficacy of the prompts added to the proformas in A+E.

Documentation of the SADPERSONS score increased in 2014 compared to 2013. This shows a good efficacy of the adaptation of the proforma to encourage documentation of the score in the notes. The teaching to increase awareness and the movement of the proformas back to the doctors station to an easily accessible place were also points that were mentioned by junior doctors as making the use of the proforma more common. These interventions will be continued.

See supplementary file: ds4350.pdf - "Initial and updated SADPERSONS proformas, and graphs of results."

Lessons and limitations

A problem that we came up against was the low rate of administration of activated charcoal. Although the compliance in patients in which activated charcoal was indicated was high, the actual rates of administration were not brought up by any of the measures we put in place. As previously discussed, this was mainly due to late presentation to A+E after overdose. It is uncommon for a patient who took an overdose to present to A+E within two hours of the overdose, and this is a difficult factor to alter. Proposed interventions (such as administration of activated charcoal by ambulance crews or giving the patients education on how to use activated charcoal and allowing a dose to be taken home in the event of an overdose) have been difficult to put in place.

Another issue we had to deal with was ensuring the new SADPERSONS proformas remained in circulation. At first we noticed the old master copy had not been deleted, and the ward clerks were putting old versions of the proforma back into circulation. This problem was rectified when identified, but shows the importance of looking at every aspect of an intervention before initiating a change.

A factor that we noted we have no control over was the high proportion of locum doctors in A+E who do not receive the

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departmental teaching and may not be aware of the SADPERSONS score or the proformas that are available. This could be one of the reasons for the number of patients that continue to be discharged from A+E with insufficient documentation of risk assessment in their notes.

In terms of sustainability, we believe the interventions put in place should last. The master copy of the proforma has been changed, so the new proformas will continue to be replaced and stay in circulation. The department is required to repeat the audit annually so the proforma will be continually be updated to fit the NICE guidelines.

A limitation to the audit is that it was carried out in only one A+E department. This could lead to biases that may mean that the interventions would not have the same effect in another A+E department. The practices of different A+E's in the country vary, for example a system that is less reliant on paper forms and proformas may benefit less from the introduction of a proforma such as the one used in this study.

In terms of the cost effectiveness of the interventions, the proformas were a cheap way of transferring information, and the teaching session was a pre-existing one that was slightly adapted to increase awareness of the proforma, so did not require any extra financial input. The see and greet nurse is a more expensive intervention, however this was a staff position that has a wide range of uses outside of initial management of self harm, and a proforma in the see and greet room to encourage activated charcoal administration is of little extra cost.

Conclusion

Suicide remains one of the most common causes of death in young adults, and they often present to A+E. Identifying the patients that have a high future risk of suicide and referring them for proper follow up with the mental health team is essential. This audit cycle has shown an initial poor compliance to the NICE guidelines on initial management of self harm and suicide attempts in the James Paget A+E, which has been improved greatly with simple interventions. Following the proforma that we have made available prompts complete adherence to the NICE guidelines, which is safer for the patients. In addition, it is safer for the doctors medico-legally as their documentation will contain all the information necessary to determine the proper future suicide risk of a patient presenting with an episode of self harm or a suicide attempt, allowing them to be better informed in their decision to refer the patient on to mental health services.

References

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Declaration of interests

Nothing to declare.

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