The role of the general dental practitioner in managing patients who self-harm

K. S. Achal,*[1] J. Shute,[2] D. S. Gill[3] and J. M. Collins[4]

IN BRIEF

- Highlights the condition of self-harm to dental professionals.
- Outlines associated risk factors and signs of self-harm.
- Stresses that dental professionals should refer self-harm cases on to the appropriately qualified professional.

PRACTICE

There has been a reported increase in the incidence of self-harm within the United Kingdom. This is of great concern, as a number of studies have shown self-harm to be a major risk factor to completed suicide. However, the identification of self-harm provides an opportunity for support and treatment. Mental health is an area that often receives little attention in the undergraduate dental curriculum. Yet dental practitioners, as healthcare professionals, need to be vigilant for any risk factors or signs of mental illness among their patients and make appropriate onward referrals. The purpose of this article is to examine the current evidence and aspects of self-harm, particularly in young adults and adolescents that are relevant within a dental settling.

INTRODUCTION

Several recent epidemiological studies have reported a significant rise in self-harm incidences within the United Kingdom.[1–4] This is a worrying trend as a number of studies have shown self-harm to be a major risk factor to completed suicide.[1,5,6] In view of this, this high-risk group has become part of the main focus of the Government's national suicide prevention strategy.[7]

The National Institute for Health and Care Excellence (NICE) defines self-harm as 'self-poisoning or self-injury, irrespective of the apparent purpose of the act'.[8,9] They also state 'self-harm to be an expression of personal distress' and emphasise that it is not an 'illness'. 'Mind', a mental health charity, describe self-harm as a means of expressing what cannot be articulated and liken it to an 'inner scream', which helps people temporarily feel better able to cope.[10]

There are many risk factors associated with self-harm but of particular relevance to dental practitioners and orthodontists is a recent study that found a link between children who self-harm and who are subjected to frequent bullying.[11] This is of interest, as it is has been shown that children with particular types of malocclusions are more likely to be bullied.[12]

The aim of this article is to examine the current evidence and aspects of self-harm, particularly in young adults and adolescents that are of relevance within a dental setting.

Table 1 Substances reported to the National Poisons Information Service (NPIS) London Centre in 2002 as implicated in self-poisoning[20]

Substance	Number of reports	Percentage of total enquiries
All analgesics and anti-inflammatory drugs	26,155	39
(Paracetamol)	10,368	(15)
(Aspirin)	2,997	(5)
(Other analgesics)	12,790	(19)
Anti-depressants	10,433	15
Benzodiazepines	6,164	9
Major tranquilisers (antipsychotics)	3,873	6
Hypnotics/sedatives	3,603	5
Other	17,456	26
Total number of reports	**67,684**	

HOW COMMON IS SELF-HARM?

The NICE guidelines suggest that many cases of self-harm never present to healthcare professionals and therefore it is very difficult to establish how common self-harm actually is.[8]

It is known that self-harm can present in any age or gender group but is more common among females particularly during adolescence.[13] A self-reporting survey of 15-16-year-olds found that 13% had self-harmed at one point and just over half of these (7%) had done so in the previous year.[13] While a national study of adults found that approximately 5% of all respondents had self-harmed in the past.[14] A recent estimate of self-harm cases presenting to emergency departments in the UK was at 220,000 involving approximately 150,000 individuals in 2001.[1] From the published statistics, it is evident that self-harm is a common presentation at general hospitals and cause for acute admission.

A recent online self-selecting survey conducted by a number of charities found that of the 1,392 respondents (aged 9-18) more than half self-harmed a few times a week.[15] It was also seen that male respondents were less inclined to confide in anyone about their self-harm.

[1]Specialist Orthodontist, Good Hope Hospital, Heart of England NHS Trust, Sutton Coldfield; [2]Liaison Psychiatry Consultant, UCLHT Eastman Dental Hospital and North Middlesex University Hospital, Barnet, Enfield and Haringey Mental Health Trust; [3]Consultant Orthodontist, Great Ormond Street NHS Foundation Trust, UCLHT Eastman Dental Hospital and UCL Eastman Dental Institute, London; [4]Consultant Orthodontist, UCLHT Eastman Dental Hospital, 256 Grays Inn Road, London
*Correspondence to: Mr Kulraj S. Achal
Email: kulraj.achal@icloud.com

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Table 2 Specific signs which may indicate self-harm

Specific signs of self-harm
Unexplained cuts, scratches, bruises or burns on body – particularly on wrists and forearms
Traumatic gingival lesions not consistent with dental health/occlusion
Unexplained loss of teeth
Signs they have been pulling out their hair or eyelashes

Table 3 Managing patients who self-harm. Adapted from NICE guidelines[8]

Key principles	Key components
Person centred non-judgemental approach	Psychosocial assessment
Good communication between professionals	Risk assessment
Good communication between professionals and patient	Care planning
Involve families, carers and significant others if patient agrees	Risk management planning
Develop a trusting, supportive and engaging relationship	Interventions for self-harm
	Treating associated mental health conditions

Table 4 Factors to note for record keeping and referrals

Contemporaneous and accurate observations and actions should be recorded
Ascertain whether patient has sought help or is currently under management for mental health problems and if so with whom?
Nature, location and extent of injury (use diagram or photograph with scale)
Explanation of the injury including a thorough history of previous injuries, if any
Communication between professionals and patient and/or family of the patient
Discussions with other agencies for example, social services including face-to-face communication, telephone conversations and letters especially those concerning children

TYPES OF SELF-HARM

Self-harm is broadly classified into two groups: self-injury and self-poisoning.

Self-poisoning occurs more commonly than self-injury and is more likely to present in an emergency department than physical self-injury,[13–15] which can impact on self-harm statistics.

Self-cutting is the most common presentation of self-injury behaviour.[13,16] Other ways of self-injury such as ingesting objects, hanging, burning with chemicals/heat are not seen as commonly. Instruments such as broken glass, knives, and razor blades may be used to inflict self-injury.[8] Injuries vary in severity, some being very deep involving the fascia, tendons, blood vessels and nerves, however, the majority tend to be superficial and small.[8] Cases of oral self-harm have also been reported and injuries such as fingernail biting, gingival 'picking' and auto-extraction have been described.[17–19] Research indicates that those who self-poison are more likely to be adolescent females.[20] Commonly those that self-poison will take medication that is readily available to them such as a prescribed or over the counter medication (Table 1).[21]

RISK FACTORS ASSOCIATED WITH SELF-HARM

A number of risk factors have been identified for self-harm.

Gender and age have already been highlighted, as risk factors, with a higher incidence of self-harm among young adults and adolescents and higher rates among females.[1] It has been suggested that this is due to males externalising problems and worries (that is, attributing things to external circumstances rather than self-blaming) whereas females tend to internalise these concerns.[22,23]

Socioeconomic deprivation, in particular lack of employment and poverty, have been shown to be associated with self-harm and recurrence of self-harm.[24] Marital status has also been found to be relevant with a higher incidence found among those who are separated or divorced.[25]

Research findings also demonstrate an association with psychopathologies such as depression, schizophrenia and dissociative states as a result of severe family dysfunction.[26,27] In addition, severe parental neglect, alienation, homelessness and severe peer conflict such as bullying and intimidation are important contributing factors to self-injury.[28] However, the presence of self-harm behaviour does not mean that one necessarily has a psychiatric illness or is experiencing severe social problems. Situational factors such as adverse life events can in a vulnerable individual trigger self-injury. A longitudinal study showed following the death of princess Diana deliberate self-harm rates rose significantly to just over 44% in the week following her death. Inspection of clinical notes of these patients revealed that the loss of a public figure intensified the impact of their losses and general distress.[29]

It should also be mentioned that rarely self-harm may occur unknowingly, in particular those with conditions such as Lesch-Nyhan syndrome, autism, congenital insensitivity to pain with anhidrosis and learning difficulties. Therefore the term self-injurious behaviour in this cohort of patients is more appropriate, which includes head banging and nail biting.[8]

SELF-HARM IN A DENTAL SETTING

There are no statistics available for cases of self-harm presenting in a dental setting. However, as healthcare professionals, dental practitioners, therapists, nursing and other support staff should be vigilant for any of the above risk factors for self-harm combined with any clinical findings. It is important to recognise the key signs that may indicate self-harm behaviour. It is also vital for the entire dental team to be involved in managing patients who self-harm as quite often patients tend to have a good rapport and may on occasion find it easier to reveal more to nursing and support staff.

Evidence of self-harm may be an incidental finding or a patient may purposely display signs of injury or admit to taking excessive amounts of medication as a way of seeking help. Orthodontists in particular may be likely to have a significant rapport with their teenage patients due to the nature and length of treatment and may be someone a patient feels able to confide in.

Table 2 details some of the signs that a dental practitioner might see that indicate a person is self-harming.

MANAGEMENT OF SELF-HARM

Successful management of self-harm is dependent upon developing a good trusting relationship with the patient. Therefore the use of screening questionnaire such as those used for anxiety and depression especially for initial conversations will not be appropriate. The NICE guidelines[8,9] describe best practice in managing self-harm (Table 3). They emphasise the importance of appropriate training in order to deal effectively and safely with these patients. In general, dental professionals do not have expertise in this area therefore onward referral for appropriate management is essential. Having noticed the possibility of self-harm the difficulty for the dental practitioner is in finding the best way of discussing it with the patient and making an acceptable onward referral. It is not recommended that dental

practitioners try to address any underlying problems themselves.

WHAT TO DO?

With an acute presentation of self-harm in a dental setting, where injuries are recent and require medical attention to achieve haemostasis and prevent infection, patients should be sent, accompanied to their nearest accident and emergency department for assessment and treatment. It would be up to the dentist to decide who should accompany the patient to the accident and emergency department based on what is expedient, safe and acceptable for the patient. Similarly with evidence of self-poisoning patients should be sent, accompanied, immediately to hospital or an ambulance should be called in order that necessary treatment can be instigated. At hospital, an individual needs and risk assessment that will include a psychiatric, psychological and social assessment can be carried out to help determine a management strategy.

It is more likely that dental professionals will see evidence of historic injuries, particularly on the forearms. In this context, the dental practitioner's role is to offer a respectful and sensitive conversation about self-harm with the patient in the presence of another member of staff such as a nurse or another clinician. The dental practitioner will want to provide an opportunity for the patient to talk about the problem but then to refer the patient on to more appropriate services. It is important to ensure a quiet area is chosen for this discussion where there will be no interruptions and one could not be overheard. Dental practitioners should ask whether a patient would prefer to discuss this on their own or with a parent present. Young patients should be encouraged to share their distress and self-harming behaviours with their parents. Informing their general medical practitioner is important and consideration should be given to whether there is a need to also inform social services.

If the young person chooses to be seen alone, the dental practitioner should inform the patient at the start that everything the young person tells them is confidential, however, if the young person tells them something that makes them worried that they may be at risk of serious harm, they may need to inform other professionals or a parent/caregiver. The dental practitioner can reassure the young person that they would always inform the young person that they are doing this beforehand.

Admittedly, it is likely to be difficult for dental professionals to start discussions based around potential self-harm and a suggested approach may be:

'*As a dental practitioner treating lots of teenagers' teeth I have noticed several with scars on their arms. I see that you have some scars and I feel I have a responsibility as a health professional to ask you just a little about them and check if you are getting any help...*'

It may be that the situation is now under control and these are historic injuries. The patient may now be or may have been under the care of mental health professionals. It is important to inform the general medical practitioner who can then make a referral to Child and Adolescent Mental Health Services (CAMHS) if necessary.

If a patient declines the invitation to discuss the self-harm, the dental practitioner should encourage them to discuss it with their general medical practitioner or a trusted teacher, colleague, adult relative or friend instead. Dental practitioners should also ask the patient's permission to contact the general medical practitioner and consider whether a social services referral is needed. Table 4 summarises some of the key factors to note in the clinical records. Referrals should include points three to six in the table and any other relevant information the dental professional may consider as important.

A child (aged under 16) or young person (aged 16-17) not giving consent to make a referral, communicate information to their general medical practitioner or involve their parents presents a difficult dilemma; whether to respect the patients confidentiality or not. It is very important to consider their ability to make this decision, which involves complicated ethical and legal issues such as Gillick competence,[30] capacity, safeguarding of children and risk. Dental practitioners are obliged to follow the Department of Health's *Reference guide to consent for examination or treatment*[31] and the Department of Education's *Working together to safeguard children guidance.*[32]

The General Dental Council's guidance, *Standards for the dental team* states: 'In exceptional circumstances, you may be justified in releasing confidential patient information without their consent if doing so is in the best interests of the public or the patient. This could happen if a patient puts their own safety or that of others at serious risk...'[33]

At a more practical level these issues are often beyond the knowledge and experience of most dental practitioners. Thus the best course of action is to seek advice. Dental practitioners can contact their Local Children's Safeguarding Lead to discuss the situation without revealing the patient's identity in order to get advice on whether to pass on information without the child or young person's consent. Safeguarding services are run by the local borough and contact numbers are easy to find on the local authority website. Professional indemnity bodies will also provide advice for dental practitioners on whether or not they should break patient confidentiality and inform a patient's general medical practitioner.[34]

Fig. 1 The orange ribbon is worn on self-injury awareness day in support of those who self-harm[41]

Dental practitioners can also suggest the various charities and support groups listed in the next section and give the patient the Royal College of Psychiatrist's self-harm leaflet.[35]

SELF-HARM AND THE RISK OF SUICIDE

Self-harm is often incorrectly considered as a suicide attempt in itself,[8,36] however, it is a risk factor for suicide.

Some people who self-harm may attempt suicide and the risk of suicide is highest within the first 6 months of a self-harm episode.[36] It has also been reported that as the rate of self-harm episodes increase, the risk of suicide also increases, with a 1.7% increase after 5 years, which almost doubles to 3.0% in 15 years.[28] It has also been reported that after 1 year between 0.5%-2% of people who self-harm will have committed suicide.[5]

Suicidal feelings are believed to be due to the underlying reasons for self-harm rather than due to the self-harm itself. Although a variety of risk factors may be associated with self-harm, chronic factors or factors that are persistent such as underlying psychopathologies, intense

peer and family conflict are most often the causes of continued and repetitive self-harm activity. This can intensify and lead to risk of eventual suicide attempts or completed suicide.[28]

SUPPORT FOR SELF-HARM

There are numerous mental health charities such as Young Minds,[37] Mind,[10] the National Self Harm Network[38] and SANE[39] who have comprehensive websites, publications and helplines with further information on recognising and dealing with self-harm.

Self-injury awareness day (SIAD) occurs globally on 1 March each year during which awareness agencies and the media[40] attempt to educate and improve understanding of self-harm among the public and healthcare professionals. An orange awareness ribbon is worn on this day (Fig. 1).[41]

CONCLUSION

The purpose of this paper is to highlight the condition of self-harm to dental professionals. An understanding of the associated risk factors and signs of self-harm allows dental professionals to be more vigilant. This awareness may one day enable them to help an individual in need.

AUTHORS' CONTRIBUTIONS

DG conceived the study. KSA, JC and JS prepared the manuscript. KSA, JC, JS and DG edited and prepared the final draft of the manuscript. All authors read and approved the final draft of the manuscript.

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1. Bergen H, Hawton K, Waters K, Cooper J, Kapur N. Epidemiology and trends in non-fatal self-harm in three centres in England: 2000–2007. *Br J Psychiatry* 2010; **197:** 493–498.
2. Belgamwar R B, Hodgson R E, Waters K. Trends and characteristics of deliberate self-harm hospital presentations in an English County. *Int J Psychiatry Clin Pract* 2006; **10:** 59–63.
3. Hawton K, Harriss L, Hall S, Simkin S, Bale E, Bond A. Deliberate self-harm in Oxford, 1990–2000: a time of change in patient characteristics. *Psychol Med* 2003; **33:** 987–996.
4. O'Loughlin S, Sherwood J. A 20-year review of trends in deliberate self-harm in a British town, 1981–2000. *Soc Psychiatry Psychiatr Epidemiol* 2005; **40:** 446–453.
5. Owens D, Horrocks J, House A. Fatal and non-fatal repetition of self-harm. Systematic review. *Br J Psychiatry* 2002; **181:** 193–199.
6. Cooper J, Kapur N, Webb R *et al.* Suicide after deliberate self-harm: a 4-year cohort study. *Am J Psychiatry* 2005; **162:** 297–303.
7. Department of Health. *National suicide prevention strategy for England.* London: DH, 2002.
8. *Self-harm: the short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care. NICE clinical guidelines, No. 16.* British Psychological Society, 2004. Online guidelines available at http://www.ncbi.nlm.nih.gov/books/NBK56385/pdf/TOC.pdf (accessed August 2014).
9. *Self-harm: the NICE guideline on longer-term management. NICE Clinical guidelines, No. 133.* British Psychological Society, 2012. Online guidelines available at http://www.ncbi.nlm.nih.gov/books/NBK126777/pdf/TOC.pdf (accessed August 2014).
10. Mind. *Self-harm.* Online information available at: http://www.mind.org.uk/help/diagnoses_and_conditions/self-harm (accessed August 2014).
11. Fisher H L, Moffitt T E, Houts R M, Belsky D W, Arseneault L, Caspi A. Bullying victimisation and risk of self harm in early adolescence: longitudinal cohort study. *BMJ* 2012; **344:** e2683.
12. Seehra J, Fleming P S, Newton T, DiBiase A T. Bullying in orthodontic patients and its relationship to malocclusion, self-esteem and oral health-related quality of life. *J Orthod* 2011; **38:** 247–256.
13. Hawton K, Rodham K, Evans E, Weatherall R. Deliberate self-harm in adolescents: self report survey in schools in England. *BMJ* 2002; **325:** 1207–1211.
14. Meltzer H, Lader D, Corbin T, Singleton N, Jenkins R, Brugha T. *Non-fatal suicidal behaviour among adults aged 16 to 74 in Great Britain.* London: The Stationery Office, 2002.
15. Hawton K, Fagg J, Simkin S *et al.* Trends in deliberate self-harm in Oxford, 1985–1995. *Br J Psychiatry* 1997; **171:** 556–560.
16. YouthNet. *Charities unite to raise awareness about self-harm.* YouthNet 2012. Online article available at http://www.youthnet.org/2012/02/young-people-are-suffering-self-harm-in-silence/ (accessed August 2014).
17. Singh P, Emanuel R, Parry J, Anand P S. Three paediatric patients with oral self-mutilation- a report. *Dent Update* 2008; **35:** 280–283.
18. Spencer R, Haria S, Evans R, Gingivitis artefacta - a Case report of a patient undergoing orthodontic treatment. *Br J Orthod* 1999; **26:** 93–96.
19. Limeres J, Feijoo J, Baluja F *et al.* Oral self-injury: an update. *Dent Traumatol* 2013; **29:** 8–14.
20. Hawton, K, Hall S, Simkin S *et al.* Deliberate self-harm in adolescents: a study of characteristics and trends in Oxford, 1990–2000. *J Child Psychol Psychiatry* 2003; **44:** 1191–1198.
21. National Poisons Information Service, Association of Clinical Biochemists. Laboratory analyses for poisoned patients: joint position paper. *Ann Clin Biochem* 2002; **39:** 328–339.
22. Denham S, Kochanoff A T. Parental contributions to preschoolers' understanding of emotion. *Marriage Fam Rev* 2002; **34:** 311–343.
23. Ge X, Lorenz F O, Conger R D, Elder G H, Simons R L. Trajectories of stressful life events and depressive symptoms during adolescence. *Dev Psychol* 1994; **30:** 467–483.
24. Hawton K, Harriss L, Hodder K, Simkin S, Gunnell D. The influence of the economic and social environment on deliberate self-harm and suicide: an ecological and person-based study. *Psychol Med* 2001; **31:** 827–836.
25. Petronis K R, Samuels J F, Moscicki E K, Anthony J C. An epidemiologic investigation of potential risk factors for suicide attempts. *Soc Psychiatry Psychiatr Epidemiol* 1990; **25:** 193–199.
26. Fergusson D M, Michael T, Lynskey M T. Suicide attempts and suicidal ideation in a birth cohort of 16-year-old new Zealanders. *J Am Acad Child Adolesc Psych* 1995; **34:** 1308–1317.
27. Tsati E, Iconomou T, Tzivaridou D *et al.* Self-inflicted burns in Athens, Greece: a six-year retrospective study. *J Burn Care Rehabil* 2005; **26:** 75–78.
28. Greydanus D E, Shek D. Deliberate self-harm and suicide in adolescents. *Keio J Med* 2009; **58:** 144–151.
29. Hawton K, Harriss L, Simkin S *et al.* Effect of death of Diana, Princess of Wales on suicide and deliberate self-harm. *Br J Psychiatry* 2000; **177:** 463–466.
30. *Gillick v West Norfolk and Wisbech Area Health Authority and another.* 1985. Online information available at http://www.hrcr.org/safrica/childrens_rights/Gillick_WestNorfolk.htm (accessed August 2014).
31. Department of Health. *The reference guide to consent for examination or treatment.* 2nd ed. London: DH, 2001. Online guide available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/138296/dh_103653__1_.pdf (accessed August 2014).
32. Department of Education. *Working together to safeguard children.* London: Department of Education, 2013. Online guide available at http://media.education.gov.uk/assets/files/pdf/w/working%20together.pdf (accessed August 2014).
33. General Dental Council. Standards for the dental team. London: GDC, 2013. Online standards available at http://www.gdc-uk.org/Dentalprofessionals/Standards/Documents/Standards%20for%20the%20Dental%20Team.pdf (accessed August 2014).
34. The Medical Defence Union. *Medico-legal guide to confidentiality 3.1: introduction and principles.* London: MDU, 2012. Online article available at http://www.themdu.com/~/media/Files/MDU/Publications/Guides/Confidentiality/Medico-legal_guide_to_confidentiality_31_%20Introduction.pdf (accessed August 2014).
35. Royal College of Psychiatrists. *Self-harm leaflet.* Online leaflet available at http://www.rcpsych.ac.uk/mentalhealthinfoforall/problems/depression/self-harm.aspx (accessed August 2014).
36. Skegg K. Self-harm. *Lancet* 2005; **366:** 1471–83.
37. Young Minds. *About us.* Online information available at http://www.youngminds.org.uk/about (accessed August 2014).
38. National Self-Harm Network. *Aims of this forum.* Online information available at http://www.nshn.co.uk/ (accessed August 2014).
39. SANE. *About SANE.* Online information available at http://www.sane.org.uk/what_we_do/about_sane/ (accessed August 2014).
40. Harrison A. More *young people are self-harming, say children's charities.* BBC News, 2013. Online article available at http://www.bbc.co.uk/news/education-21618174 (accessed August 2014).
41. *Orange ribbon.* Online information about the image available at http://en.wikipedia.org/wiki/File:Orange_ribbon.svg (accessed August 2014).