

Major trauma due to deliberate self harm: A QEUH Emergency Department Study

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Introduction

The Scottish Trauma Audit Group (STAG) aims to improve patient care, experience and outcomes by recording trauma cases across Scotland.¹ This retrospective study aims to use STAG data to quantify the burden of deliberate self harm (DSH) presenting as major trauma to QEUH Emergency Department.

Key Definitions

Injury Severity score (ISS) is, “an anatomical score that measures the overall severity of injured patients”.²

“All injuries are assigned an Abbreviated Injury Scale (AIS) code and score from an internationally recognised dictionary. Scores range from 1 (minor injury) to 6 (an injury that is thought to be ‘incompatible with life’). Patients with multiple injuries are scored by adding together the squares of the three highest AIS scores. The ISS can range from 1 to 75”.³

Major trauma is defined as an injury severity score (ISS) >15.

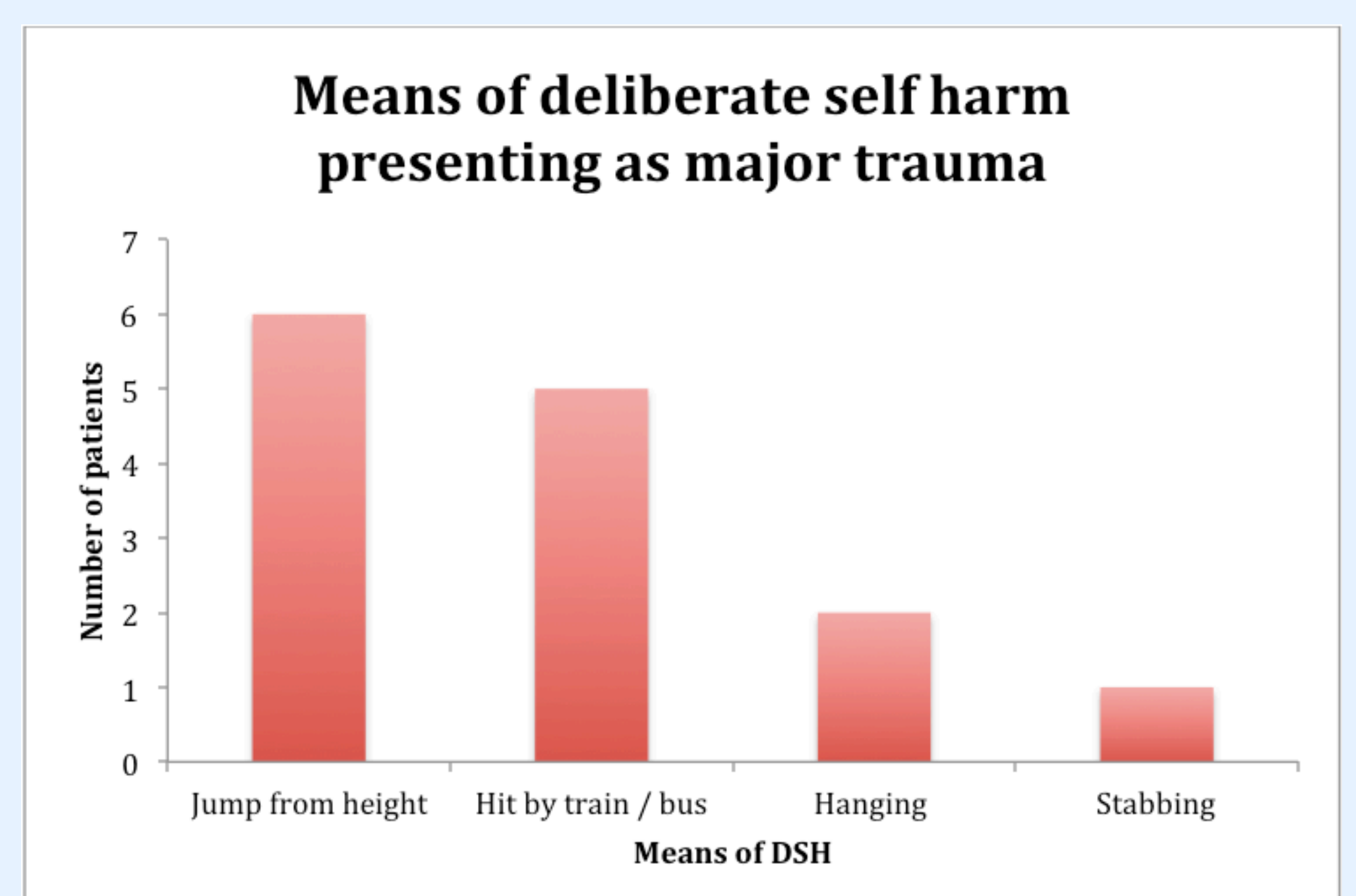
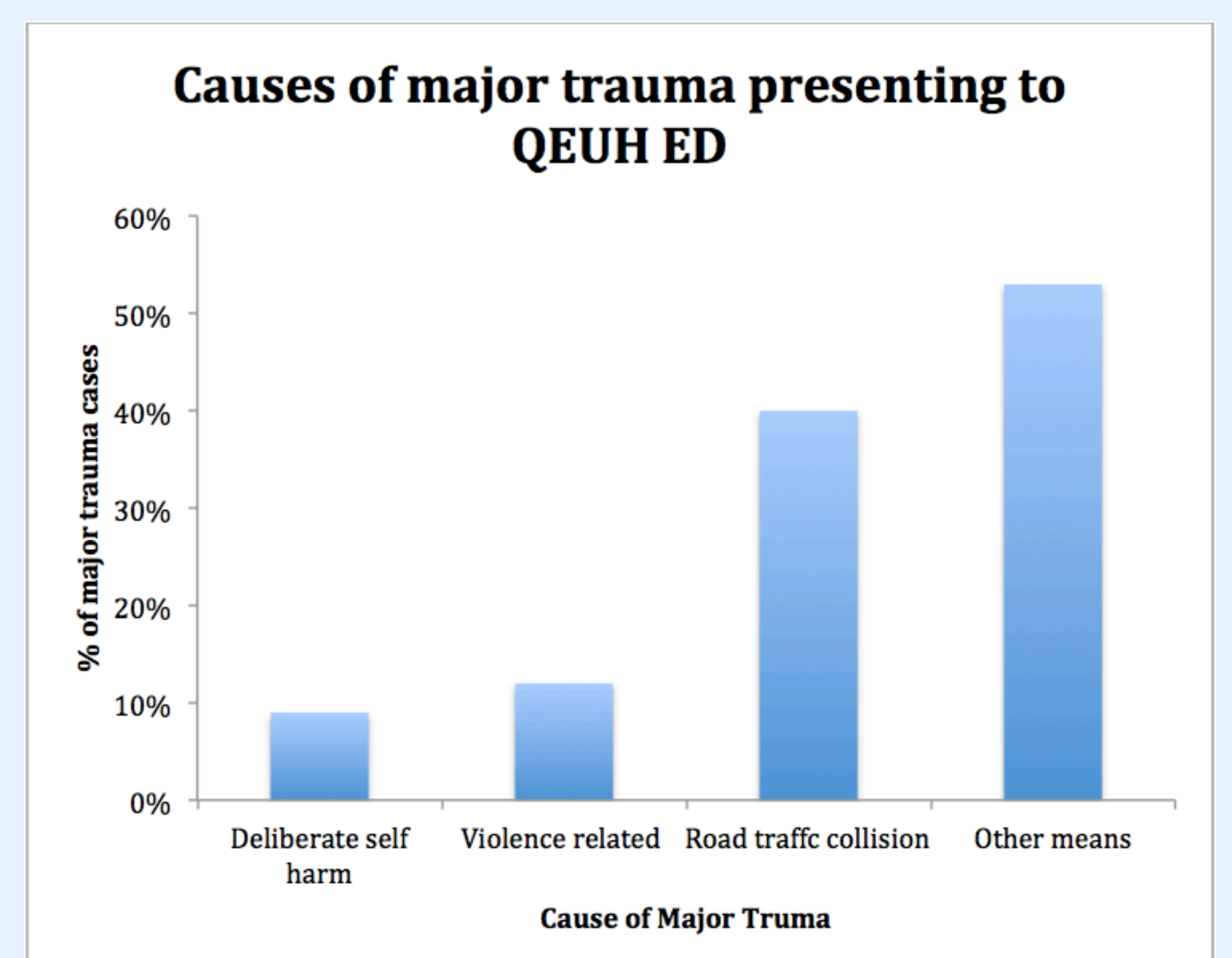
Method

All major trauma cases enrolled in STAG who presented to the QEUH ED from 29/10/2015 – 29/10/2016 had their case notes reviewed. Those who explicitly stated their injuries were DSH were noted. Patient demographics including age, sex and ISS were also recorded.

Results

Over a period of 1 year there were 156 major trauma cases, 14 of which (9%) were DSH. These included 5 females and 9 males, aged 24 to 76 years old. The mean age was 36. The most common methods of injury were jumping from height (6) or being hit by a train or bus (5). Injury Severity Scores ranged from 15-59 with a mean of 28. A further three cases were highly suggestive of DSH but the notes were inconclusive. 5 out of 14 died.

An additional finding of this study shows during this time period 13% of cases presenting as major trauma were violence related, and 26% were attributable to road traffic collisions.



Discussion

Overall 9% of QEUH Emergency Department major trauma cases were confirmed as a result of DSH. The actual figure could be up to 12% for several reasons.

Firstly, 3 cases were suspicious of DSH but the notes were inconclusive. Secondly, a recent literature review found 1 in every 15 RTC are estimated to be intentional or have suicidal intent.⁴ At QEUH there were 40 recorded RTC cases so 2 of these may have been DSH.

Conclusion

QEUH is anticipated to become 1 of 4 major trauma centres in Scotland. With potentially 10% of major trauma being as a result of DSH, we wonder if this should be taken into consideration when planning services.

Acknowledgements

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References

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