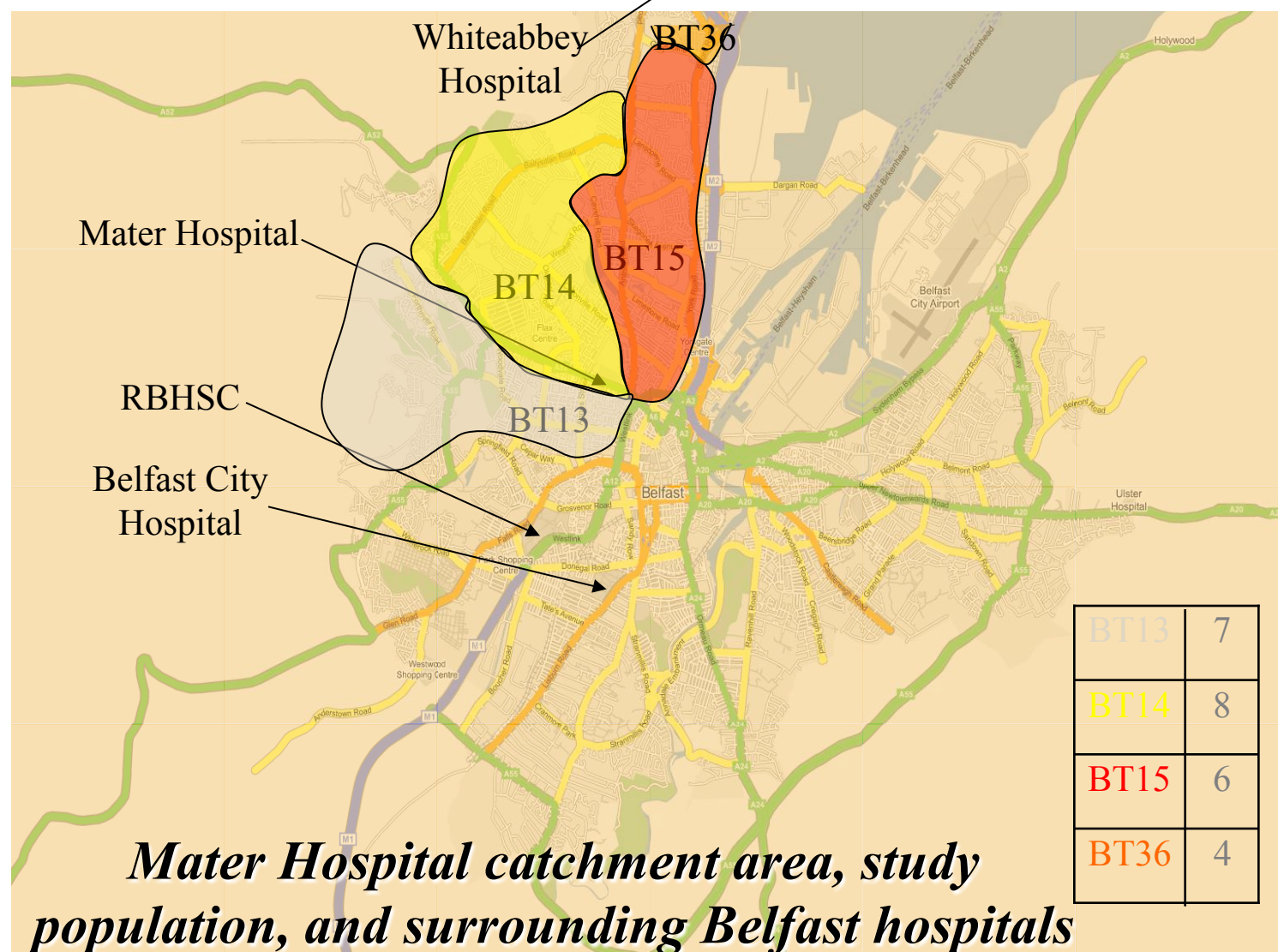


# Violence Related Injury in Children Attending an Inner City Emergency Department

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There is increasing interest in the use of Emergency Department injury data in planning community violence prevention initiatives<sup>1</sup>. The Mater Hospital Trust is situated in North Belfast and serves a largely urban catchment area with high levels of socio economic deprivation. The area has also suffered from significant community violence related to the conflict in Northern Ireland over the last thirty years. Victims of interpersonal violence are common in our Emergency Department and have included adolescents and young children. Relatively few studies have looked at violence related injuries in children<sup>2</sup>. All paediatric case notes at the Mater are reviewed on a daily basis by the duty Emergency Department consultant and because of the number of violence related injury attendances this study was initiated.



## Methods

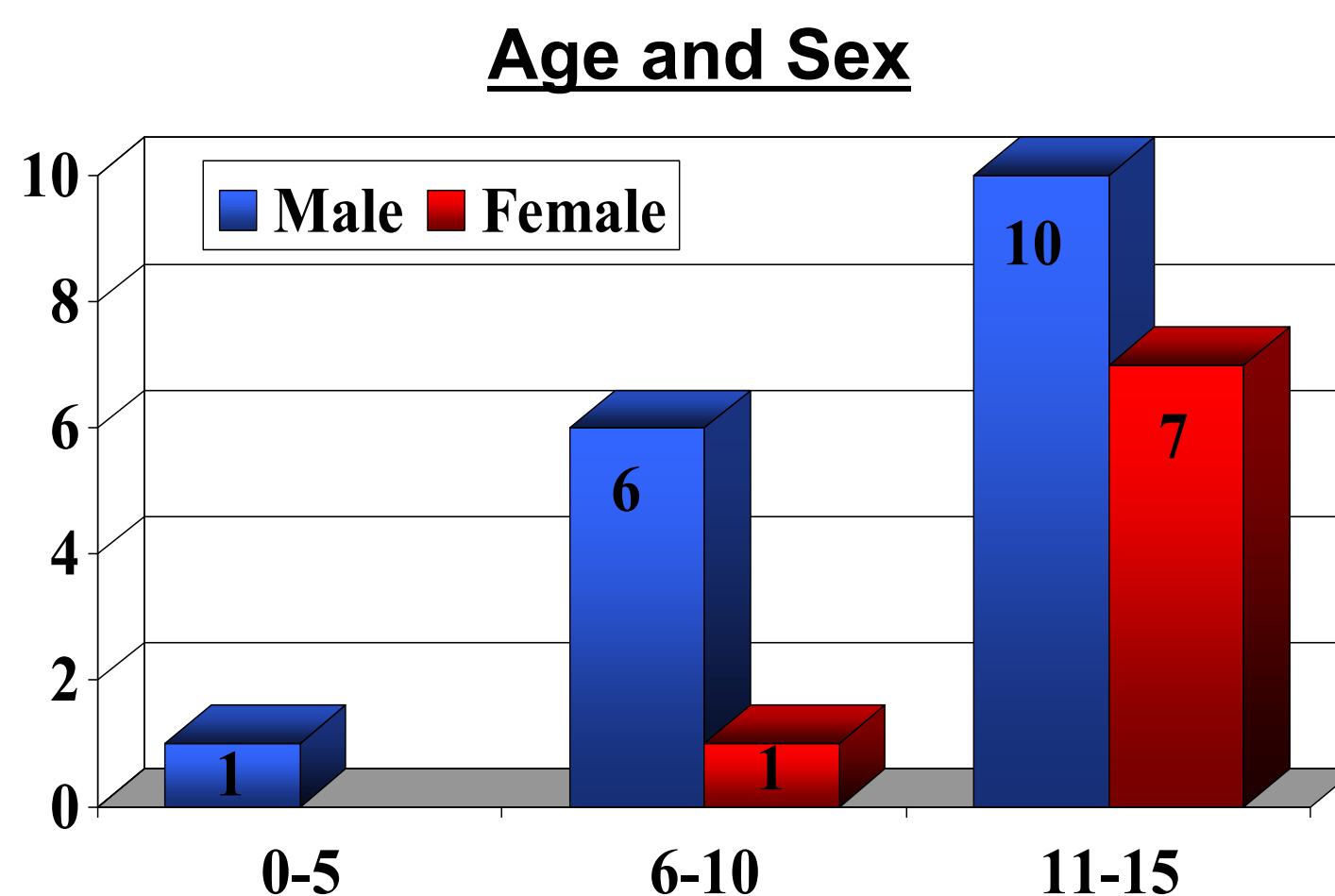
- Injury Record Review of all children under 16 attending over a two month summer period.
- Violence related injuries were defined as those resulting from a situation of conflict involving two or more persons with the intent to harm.
- Self inflicted injuries and injuries caused by child abuse where excluded.



*Shankill Area, BT13*

## Results

During the two-month study period 25 patients under the age of sixteen with violence related injuries presented to the Emergency Department (age range 5-15 years). This comprised 17 males and 8 females. There was one fatality during the study period. Six cases involved children under the age of 10.



## Type of Injury

Over half of the violence related injuries resulted in lacerations. Three sustained fractures;

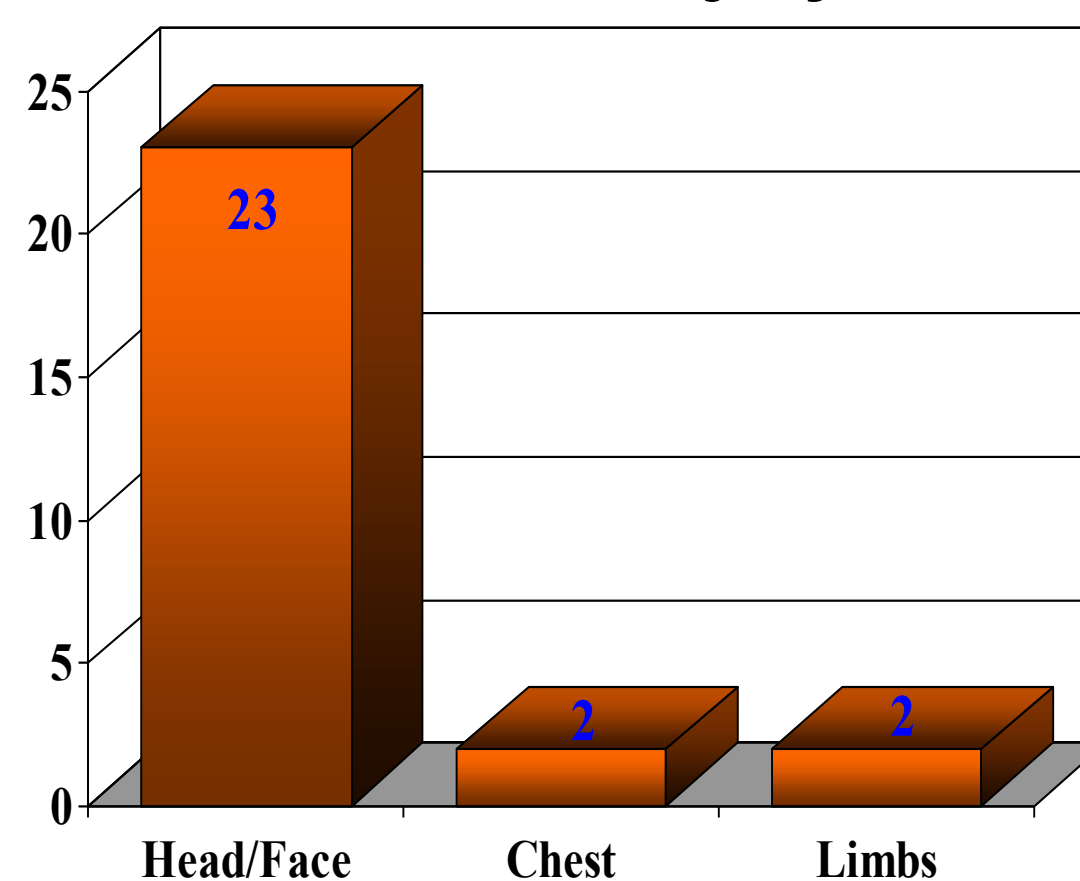
- # maxilla – punch
- # nose – punch
- # radius – arm pulled while patient resisting arrest (14yr, F).

One 15 year old received stab wounds to the chest and subsequently died.

## Violence related injuries in children under 10

Age	Mechanism	Location	Injury
5	Golf club	-	Facial swelling
6	Missile – Beer can	Street	Facial laceration
7	Golf club	Street	Scalp laceration
8	Golf club	Street	Facial swelling
9	Golf club	Park	Scalp haematoma
9	- (Did not wait)	-	Scalp laceration

## Site of Injury



## Mechanism of Injury

Missiles included beer cans, bricks, slate, an aerosol can and stones. A knuckle duster was used in one of the assaults. Surprisingly golf clubs were used in 32% of assaults.

Missile	8
Golf club	7
Kick	2
Punch	2
Arm pulled	1
Baton	1
Stabbing	1
Other	3

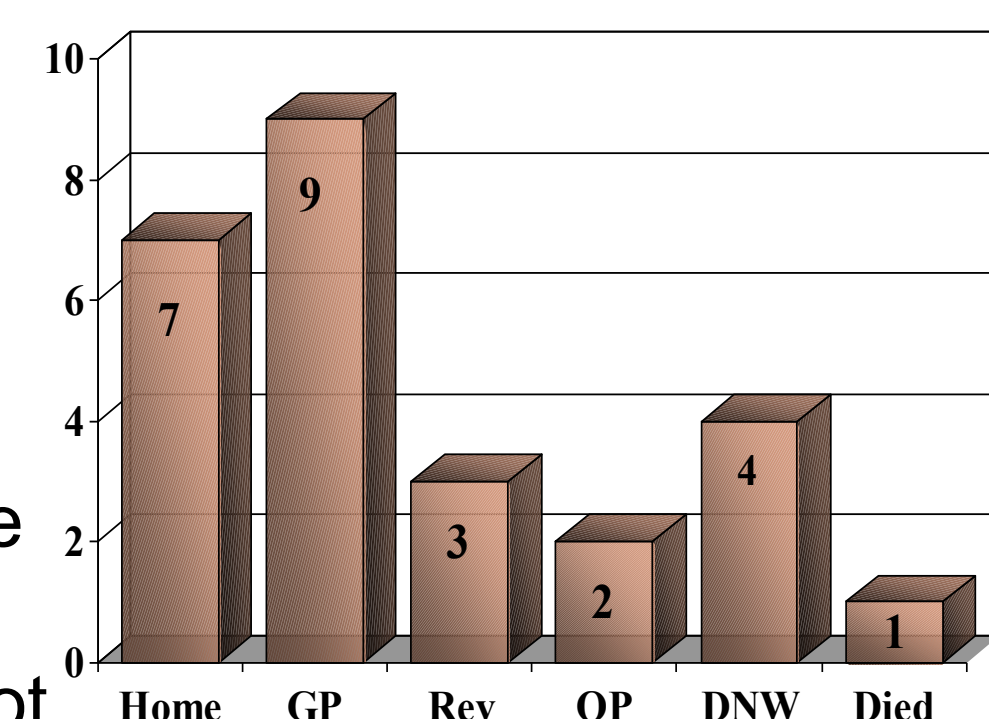
## Discussion

Even if we exclude the single fatality in the study period, this level of violence related injury in children is disturbing. While the Mater Hospital catchment area is North Belfast, the city has a dedicated Paediatric Emergency Department (RBHSC) approximately 3 miles from our Hospital. It is likely that other children from our area with violence related injuries are also treated there.

It is known that many violent incidents are not reported to the police, police involvement was recorded in only 3 of our cases. This confirms the value of Emergency Department violence related injury surveillance. We know that the U.K. Government has indicated that it plans to use injury data from Emergency Departments to inform Community Violence Prevention<sup>3</sup>, and it is important that Emergency Department violence related injury data includes specific information about incidents involving children. On-going collection of violence related injury data can allow National and International comparisons to be made as well as advising local violence related injury prevention initiatives.

## Injury Outcomes

Three patients required review in the emergency department while two required further specialist review. The nine G.P. reviews were for wound care and removal of stitches. Only seven patients did not require follow-up arrangements on discharge.



## Recommendations

- Violence Related injury data should be collected by all Emergency Departments
- Violence related injury data should include specific information on incidents involving children
- Prospective data collection in the Greater Belfast area should commence immediately
- Use of Golf clubs as assault weapons requires further study

- References:**
- 1) Shepherd JP, Sivarajasingam V, Rivara FP. Using injury data for violence prevention *BMJ*, 2000;321:1481-1482
  - 2) Sege RD *et al.* Pediatric Violence-Related Injuries in Boston. *Arch Pediatr Adolesc Med*, 2002;156:73-76
  - 3) Simmons J. Review of crime statistics: a discussion document. *London: Home Office*, 2000