INTRODUCTION

On 5 December 2017 Save the Children and the Centre for Blast Injuries Studies based at Imperial College London convened a pioneering workshop to scope issues around paediatric blast injury. The workshop was the first of its kind to draw together experts from every point of the blast casualty continuum, from pre-hospital care through surgery and paediatrics, to rehabilitation and physiotherapy, together with specialists in humanitarian systems solutions, frugal systems prosthetic design, and academic leaders in the science of blast injury.

As contemporary conflict becomes increasingly complex, protracted, and fought in towns and cities with explosive weapons that impact over a wide-area, Save the Children and Imperial College have partnered together to expand the focus on and understanding of the destructive impacts that explosive weapons are having on civilians. Not only are children being killed and maimed – potentially constituting Grave Violations\(^1\), we are also observing devastating, predictable and wide-spread patterns of harm on civilians and civilian infrastructure essential for their physical and mental well-being, education, health and livelihoods.

While the effects of explosive weapons and blast injury are extensive and wide ranging, including potentially significant and little explored impacts on mental health and psycho-social well-being; the group sought to focus the discussion by answering two specific questions:

“When a child is injured by explosive weapons, which medical specialists are best able to treat their injuries? What can be done to make their treatment and recovery as effective as possible at the point of wounding and beyond?”

This communique summarises the key discussion points from the workshop and lays out specific, tangible recommendations to address the challenges identified and plot a way forward to ensuring effective treatment of blast injuries in children and improving outcomes for them and their futures.

KEY CHALLENGES

Much is unknown about paediatric blast injury treatment and outcomes. The field lies at the intersection of three poorly researched disciplines: blast injury physiology, paediatric trauma care, and humanitarian medical aid to vulnerable patients in low resource medical environments.\(^2\) Even the simplest things are hard: we are not able to say definitively how different the treatment of the blast injured child is from the blast injured adult. Contributing to this is the lack of comprehensive, systemically collected data across conflict settings that can be collated, analysed and published, setting out what we know about paediatric blast injury and good practices to take forward.

Participants at the workshop posted a key challenge for relevant stakeholders to consolidate existing data sets and create a universal system to collect and report on data going forward. This was a primary call by participants highlighted in the recommendations below. They also identified two significant additional gaps.

\(^1\) In 2005 the UN Security Council established a Monitoring and Reporting Mechanism (MRM) to report on six Grave Violations against committed against children in times of armed conflict. These include the killing and maiming of children, attacks on schools and hospitals and the denial of access to humanitarian aid.

Simple, accessible and easy to use guidance materials that span the full blast injury continuum also don’t exist for practitioners. This is compounded by a severe shortage of expert responders across the medical pathway who have the specialist knowledge and skills to treat trauma injuries in children.

Awareness and understanding by the international community on the realities of blast injury on children and civilians more broadly is low, and compounding this, survivors of blast injuries do not have stories and examples of role models within their communities to show the possibilities of how to rebuild their lives with dignity.

RECOMMENDATIONS FOR IMMEDIATE ACTION

1. Establish a Paediatric Blast Injury Partnership (PBIP) of expert individuals, institutions, INGOs, patients and communities committed to finding practical solutions to the challenges of paediatric blast injury, particularly those which operate within the communities from which paediatric blast patients come and to which they will, hopefully, return.

2. Develop a comprehensive network amongst the Partnership’s own members and other relevant parties to consolidate and communicate existing research and treatment practice of paediatric blast injury. This will include the systematization of a preliminary Paediatric Blast Injury Literature Review.

3. Create a global data set for paediatric blast injury treatment and outcomes, designed to help answer questions around the circumstance, cause and burden of injury, trends in management, and patient outcomes. This endeavour should begin by mapping current datasets and identifying opportunities to consolidate information, before moving on the development of universal systems to collect, hypothesise, analyse and report. This will require a concerted, consolidated and focused effort by all relevant multi-national agencies to both define research questions, design data sets and coordinate the existing material. The Paediatric Blast Injury Partnership could provide expert advice on the structure of such a resource, the standards of data quality, metrics, and analysis of the material and the data set as a whole as it evolves.

4. The Paediatric Blast Injury Partnership to co-ordinate the creation of a paediatric blast resource for circulation to medical staff and support workers in affected areas. This will, uniquely, deal with every stage of paediatric blast injury, from first response to rehabilitation, pain and prosthetic management, and peer-to-peer psycho-social support systems. It will be both a physical book and available as an online resource, reflecting the difficulties in digital communications that can prevail in conflict zones. It will be designed for maximum utility and resilience in the field. It will focus on transferable skills and knowledge, both within the medical system and out into the patient’s family and community space. This resource to be available for distribution in its various formats during 2018.

5. The Partnership to co-ordinate a programme to define specific technical research challenges within the continuum of paediatric blast injury, from pre-hospital to rehabilitation and beyond. This will include the allocation of financial and scientific resources to deliver research and implement findings across a spectrum of institutions, from academic to INGO sapling labs. This will be a medium-term deliverable, from September 2018.

6. Save the Children to lead on establishing a resource of community-based case studies to portray the human face of, and life beyond, paediatric blast injury to both members of that community themselves, and to the public and policy makers worldwide.