

Psychological first aid for children

Kris Spaepen and **Erik De Soir** call for more attention to be paid to early recognition of the symptoms of acute stress in children after a traumatic event



DESPITE THE EXISTENCE OF A Psychosocial Intervention Plan (PIPS), there is still no evidence-based standard of care for acute psychological assistance after a traumatic experience for children in Belgium. In our literature study we found enough evidence to conclude that Belgian children

too will show signs of acute stress after a traumatic event, and this group can be reduced when these symptoms are recognised early.

As a healthcare provider, being confronted with a major incident can be psychologically and emotionally distressing. Acting professionally during such an event can be

The nature and severity of the situation should be explained to the children as well as their parents

daunting in itself and providing psychological first aid to victims is another challenge.

It comes as nothing new when one states that for rescuers involved in traumatic experiences, in our case Road Traffic Accidents (RTAs), the situation becomes even more distressing when it involves children.

In Belgium, in recent years, a lot of work has been invested into psychological first aid during and after major incidents. The Federal Public Health Service started in 1997 with the development of the current PIPS. A recent Royal Decree of February 16, 2006, concerning disaster planning and preparedness, placed this plan within the second disaster discipline, ie the emergency medical services and psychosocial assistance, as a part of the medical emergency and intervention plans. Even more recently, local authorities have received a psychosocial guide which explains the PIPS and how it could and should be implemented by local communal authorities.

TRAUMATIC SYMPTOMOLOGY

Major incidents may tend to draw a lot of attention, but what do we do with smaller crises? All too often victims and their relatives are left to cope on their own.

Owing to this gap, we performed a literature study on psychological first aid for children after a traumatic experience. The purpose was to provide emergency personnel with a theoretical framework and some practical guidelines for psychological first aid for children.

We conducted a specific study in trauma literature, in which we looked for: Suitable terminology in defining stress reactions; symptomology of a traumatic experience; possibilities for rapid and easy screening of victims, to identify as soon as possible who might be at risk for developing persistent traumatic stress; and practical guidelines for emergency personnel who

would be delivering psychological first aid to children after a traumatic experience.

Our first step was to find out exactly what defines a shocking experience and when a shocking experience becomes a traumatic experience. In the trauma literature we studied we found a very heterogeneous terminology and often the same terms were used for several meanings. This resulted in a blurring of the exact meaning of the words. We therefore tried to clarify the diversity of effects of a shocking experience and the time-bound aspects of coping with a traumatic experience.

In our study we used RTAs as a shocking experience, mainly because of higher prevalence.

Offering the right kind of help the moment it is needed, using the correct techniques, is one of the hardest challenges for rescue personnel. Therefore we focused on screening possibilities, to identify those who are at specific risk for developing persistent traumatic stress. In addition to that, we specifically searched for screening possibilities identifying children at risk.

One of the main goals of our study was to try to perform a quick screening, identifying children at risk, and bringing these children back into psychological balance, or even preventing them from getting out of psychological balance during or after a shocking experience.

When the theoretical framework was in place, we could focus on the final chapter of our thesis – offering practical guidelines for emergency personnel.

To define a shocking experience, we used the criterion A1 for Post Traumatic Stress Disorder (PTSD) in the *Diagnostic and Statistical Manual of Mental Disorders*, American Psychiatric Association (2000). We defined Acute Stress Disorder (ASD) and differentiated PTSD and ASD.

Results from a study conducted by The Children's Hospital of Philadelphia showed that 88 per cent of the children and 83 per cent of the parents reported at least one significant symptom of ASD following RTAs. The same study showed follow-up results of 28 per cent of the children and 23 per cent of the parents presenting severe distress. We can therefore assume that it is normal for symptoms of ASD to be observed in children and their parents following an RTA.

Other studies show that children and their parents can cope with symptoms of ASD and that they will diminish as the physical complaints decrease.

However, there are still 28 per cent of

“When not told the truth, a child will start to fantasise his or her own truth, which is almost certainly going to be worse than the actual reality”

children and 23 per cent of parents who present at hospital with severe distress. If we were to apply these figures onto Belgian statistics – generalised, without taking into account culture and values – we would observe that in 2002, 14,418 children (age 0 – 19 years) were involved in an RTA. Using the figures mentioned above, we would see a staggering 4,037 children presenting themselves with severe distress symptoms.

It is of great importance for rescue personnel to explain to children and their parents that the symptoms they show after the accident are normal reactions to an uncommon experience.

It must also be mentioned that these reactions will diminish over the course of time. And if they don't disappear, children or parents showing continuous symptoms (dissociation, re-experiencing, avoidance, increased arousal), should seek professional care.

On-site, the main goal for rescue personnel should be the prevention of ongoing increased arousal, meaning calming the children down and returning to homeostasis (normal functioning). In other words, they should reduce the psychobiological activation triggered by the sympathetic nervous system. The longer the hyperarousal continues, the bigger the chance that victims will develop dissociative reactions, which themselves are predictive for the chronification of stress reactions.

The reason for this is that the human body can no longer cope with the ongoing stimulation and therefore dissociates the pain, orientation and parts of our consciousness from reality. The victim can possibly experience this as positive (because of the reduced consciousness of living the shocking experience), but trauma literature tells us the opposite.

The state of prolonged hyperarousal, when an organism is being continuously stimulated, is preventing the organism from returning to homeostasis. The sooner a child can be calmed down and the hyperarousal reduced, the bigger the chance that we will succeed in preventing the child from developing chronic stress reactions.

All of these suggestions can only be of help

if the rescue personnel involved can recognise the symptoms of acute stress disorder. So one of the most important lessons to be learned is the use of screening tools. These will indicate to rescue personnel if someone is at risk for chronification of stress reactions.

During the literature study we found such a screening tool. The Screening Tool for Early Prediction of PTSD (STEPP). This was designed after thorough research and studies, to be used by healthcare personnel in the acute setting of an Accident and Emergency (A&E) service, to indicate who was running the risk of developing chronic stress reactions.

The STEPP can be seen as a form of psychological triage for the A&E department, to indicate who needs further assessment on the presented stress reactions. Though indicative, it has to be stressed that it is not a diagnostic tool. The diagnosis of PTSD can only be made four weeks (one month) after the traumatic event, and the diagnosis has to be made after a clinical – diagnostic interview with a health care professional.

SCREENING

In accordance with our results, it is highly recommended that a screening for stress reactions be performed as soon as possible after admittance to the A&E department. Results of several studies show that easily obtainable physiological parameters, such as a child's heart rhythm (during admittance), are good predictors of whether one will develop chronic post traumatic stress reactions or not.

In addition to these results, several studies have shown that missed – or untreated – post traumatic stress reactions, lead to a worse medical and functional outcome after a traumatic experience.

So in such instances, there are two essential needs that must be taken into consideration, the material need and the need for information. For the former, we focus primarily on feelings of safety and well being and the restoration of human dignity. Simple things like food and drink and safe shelter can perform miracles.

To fulfil the need for information, victims must receive the correct information. And this is easier said than done. Obtaining correct information during, or directly after, a serious RTA, is not always easy – or even possible. Once the correct information has been obtained, making sure the message is understood by the child is another issue, which could require some experience and training.

Not taking a child's concerns into consideration or minimising them can lead to increased fear and profound distrust

▶ in rescue personnel. When not told the truth, a child will start to fantasise his or her own truth, which is almost certainly going to be worse than the actual reality.

On site reminders for rescue personnel include:

- Try to make sure the child is shielded from additional distress. This can be achieved by remaining calm and protecting the child from supplemental shocking images (wounded victims, deceased victims, wreckage);
- If possible, the presence of one of the parents or someone familiar to the child (nanny, schoolteacher), should be achieved, both on-scene and during transfer to the hospital or crisis centre;
- Avoid the use of sirens during transfer as much as possible. While some might find it amusing, others could find it even more distressing; and
- Try to make sure the child understands the nature and severity of the injuries he or she has received. Make sure you explain everything you do and try to explain why you have to do it. In making sure that the child understands your explanation; have them repeat your message.

In-hospital reminders for responders are:

- The A&E department can be very frightening for children. Start by introducing yourself to the child. Tell the child what you are going to do and, again, why you have to do it. Not only should you do this for the child, but also for the accompanying parent or adult. Gaining the trust of the parent or adult, could increase the child's trust in you as medical rescue personnel;
- Once again, the nature and severity of the situation should be explained to the child and, more so, to the parents;
- Pain relief management should take a great part in the initial admittance of the child. However analgesia can be an additional problem (eg fear of needles). Therefore the child needs to be calmed down. Cuddly toys are often helpful in these situations. The use of breathing, relaxation or hypnosis techniques could prove useful; and
- Make sure the parents are involved in the initial admission. Try to keep them up to date with everything you do and the reasons for it. Explain the normal admittance procedures and routines during hospitalisation. The more the parents know and understand, the better they themselves can explain it to the child. All the literature used in our study was found in Anglo-Saxon books and studies. In Belgium there are no known evidence-based results concerning ASD or PTSD on adults and most

certainly not for children. Apparently there is little or no interest in performing studies on this subject. Nevertheless we simply cannot ignore the results and figures from these studies.

We should not think that only children and their parents living on the other side of the Atlantic will show signs of ASD (possibly resulting in untreated post traumatic stress). We can assume that in Belgium too, there will be children and their parents suffering from stress

“Avoid the use of sirens during transfer as much as possible. While some might find it amusing, others could find it even more distressing”

reactions – only there are no sufficient evidence based results to confirm this hypothesis.

There is not just a lack of interest from the academic world; the Belgian Government also needs to show more concern for this subject. The few existing specialised centres and services have to fight and lobby for each penny they earn and the recognition they deserve.

Most Belgian medical first aid workers are also unfamiliar with this subject, as it goes unmentioned during basic training and refresher courses.

STRESS REACTIONS

Even other first aid workers who could come into contact with these special patients (doctors, ambulance personnel, police officers, firefighters), don't know the problems concerning potential post traumatic stress reactions. If this subject were to be included in basic training for these first aid workers, the problem would no longer go unrecognised.

But there is light at the end of the tunnel. The department of well-being at Antwerp Provincial Council is developing multidisciplinary training for first aid workers in the rescue, medical and policing fields. However, we should also consider starting a routine psychological triage on admittance to an A&E department after

AUTHORS

Kris Spaepen is a Bachelor of Nursing, Graduated Nurse in Intensive Care & Emergency Care, Accident & Emergency Service, St. Vincentiushospital Antwerp, Belgium. **Erik De Soir** is a Major, Psychologist – Psychotherapist, National Supervisor Firefighter Stress Team, Royal Military Academy, Department Behavioural Sciences, Centre for Stress and Trauma, Brussels. This article was previously published in Dutch in *Spoedgevallen* 2007; 26, nr4, 100-109. The authors would like to thank Peter Jensen BSc, MBA, for the help in translating the original article, which was written in Dutch



experiencing a potential traumatic event.

Just like a physical triage is performed to decide upon the priority of care, we should start to assess which of our (paediatric) patients should be monitored further on developing chronic stress reactions. A psychological triage tag could be a useful tool to perform this sort of triage.

TREATMENT

After experiencing a traumatic event psychological stress reactions will be found in children and their parents. Most children and parents will cope with this situation spontaneously, although some will develop untreated and unrecognised chronic stress reactions. This group can be reduced significantly when rapidly recognised and treated, preferably as soon as possible on the scene of the RTA or in the A&E department. **CRJ**

Sources

- *De Soir, E (2006)* Een heel klein beetje oorlog, Omgaan met traumatische ervaringen. *Lannoo*
- *Wilson JP, Keane TM (2004)* Assessing Psychological Trauma and PTSD, *second edition, New York, The Guildford Press.*
- *American Psychiatric Association (2000)*. Diagnostic and statistical manual of mental disorders (4th ed. Text rev.). *Washington, DC, Author.*
- *Winston FK, Kassam-Adams N, Vivarelli-O'Neill C, Ford J, Newman E, Baxt C, Stafford P, Cnaan A* Acute stress disorder symptoms in children and their parents after pediatric traffic injury, *Pediatrics, 2002;109:e90.*
- *Belgian Road Safety Institute (BIVV):* http://bivvweb.ipower.be/bivv/comm/stats_2002/2002_weggebruiker_leeftijd.htm
- *Winston FK, Kassam – Adams N, Garcia – España F, Ittenbach R, Cnaan A (2003)* Screening for Risk of Persistent Posttraumatic Stress in Injured Children and Their Parents, *JAMA 290: 643 – 649.*
- *Kassam – Adams N (2005)* Introduction to the Special Issue: Post Traumatic Stress Related to Pediatric Illness and Injury, *Journal of Pediatric Psychology, 1 – 6.*
- *Bryant RA, Salmon K, Sinclair E, Davidson P (2007)* Heart rate as a predictor of post traumatic stress disorder in children, *General Hospital Psychiatry, 29: 66 – 68*
- *Michaels AJ, Michaels CE, Moon CH, et al,* Posttraumatic stress disorder after injury: impact on general health outcome and early risk assessment. *J Trauma. 47: 460-466.*
- *Richmond TS, Kauder D, Schwab CW (1998)*, A prospective study of predictors of disability at 3 months after non – central nervous system trauma. *J Trauma; 44: 635 – 643.*