REVIEW

The psychological aspects of terrorism: from denial to hyperbole

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INTRODUCTION

Living seems to have become a risky pursuit. Last year a school in England banned tinsel at the Christmas party lest pupils strangled themselves on it. Other schools have banned the time-honoured playground sport of 'conkers' unless pupils wear goggles and protective gloves. More recently, the EU has expressed concern for Bavarian barmaids who, by wearing the traditional low cut 'dirndl', might be overexposed to ultra-violet radiation.

Because the media serve as an influential vector of risk transmission, we need to recalibrate frequently the levels of threat around us. In this 'risky' world, we also have to come to terms with the constantly emphasized threat of terrorism.

Terrorism poses a number of dilemmas. First, we need security without compromising civil liberties. Second, we need forewarning without inducing unnecessary alarm. Third, we need to invest in preparation for possible terrorist incidents without jeopardizing our commitment to other major responsibilities. Fourth, we need to be vigilant and cautious but without paralysis and paranoia.

Unfortunately, research on terrorism is patchy but some lessons have been learned, often painfully (e.g. through IRA incidents); we cannot afford to ignore them. Moreover, the so-called 'war on terrorism', if pursued only in terms of military power and increased physical security, will fail.

> 'Without attention to the psychological side of terrorism we run the risk of losing the war, because in the final analysis, the psychological aspects of terrorism represent not merely one such battle within the war, they represent the war itself.'[1]

TERROR AND THE TERRORIST

The word '*terror*' derives from the Latin '*terrere*' meaning to '*frighten*'. The widely rehearsed axiom of the Chinese strategist Sun Tzu (4th Century BCE) captures the essence of terror, '. . . kill one, frighten ten thousand'. '*The Anatomy of Terror*'[2] confirms that history is replete with examples of the use of terror in the pursuit of religious aims (e.g. the massacres by the Crusaders), material aims (e.g. the 'Stranglers' of Southern India who terrorized road travellers, and the Mafia), quasi-moral, and ideological aims (e.g. General Bedford's supremacist Ku Klux Klan, and the 'Shining Path'), and state and political aims (e.g. the Tzarist Okrhana and the Nazi Geheime Staatspolizei), and, in the current context, religio-political aims (e.g. al-Qa'ida and Hamas).

'Terror' is easier to define than 'terrorism'. Over 100 definitions of terrorism have been advanced.[3] The US Department of Justice[4] offered in 1996 the following definition:

> '. . . the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives'.

The word 'unlawful' stands out as a crucial qualifier. Against this definition where would stand the 'carpet bombing' of civilian targets in Hamburg and Dresden, the nuclear attacks on Hiroshima and Nagasaki or the recent missile attack on the civilian-staffed Telecommunications Centre in Baghdad? Not only have some definitions shown themselves to be of pragmatic convenience, Robespierre even managed to elevate the sanguineous brutality of the French Revolution (1793–1794) to a higher order.

'Terror is nothing but prompt, severe and inflexible justice, it is thus an emanation of virtue' (Cited in *Anatomy of Terror*[2] [p 77]).

THE AIMS AND OBJECTIVES OF THE TERRORIST

The objectives of terrorists vary but include:

- creating mass anxiety, fear, and panic
- fostering a sense of helplessness and hopelessness
- demonstrating the incompetence of the authorities
- destroying a sense of security and safety

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- provoking inappropriate reactions from individuals or the authorities (e.g. repressive and/or incompetent legislation or the excessive use of violence against suspect individuals and organizations).

In addition, large-scale terrorist incidents can have adverse effects on world financial markets, travel and tourism, and may trigger xenophobic counter reactions.

Post-incident psychopathology

Terrorist events may give rise to higher levels of psychopathology than that which follow natural disasters (e.g. tsunami and earthquakes), perhaps because terrorist incidents are preventable and are systematically targeted at civilians. Twelve months after the Oklahoma bombing in 1995, there were reports of higher levels of smoking, alcohol consumption, stress and post-traumatic stress disorder (PTSD) than those which prevailed in a control metropolitan community.[5] Survivors (who sought compensation) after the terrorist destruction of Pan Am Flight 103 over Lockerbie displayed features of PTSD three years after the tragedy.[6] After the destruction of the World Trade Center survivors developed chronic and disabling symptoms, particular those associated with depression and PTSD.[7] Just under 6% of US citizens outside the New York area reported PTSD symptoms six months after those attacks.[8] North and her colleagues,[9] in a comparative study of survivors of the Nairobi and Oklahoma bombings, found similar rates of PTSD (25.8% and 19.5% for males, respectively, and 35.1% and 34.0% for females, respectively). Gunaratnam and colleagues[10] reported higher rates of PTSD among land mine victims in Sri Lanka compared to those among the general Sri Lankan population who had been exposed to war trauma.

Gurwitch *et al.*[11] have highlighted the vulnerability of children to terrorist incidents. Two years after the Oklahoma bombing, 16% of children and adolescents presented with symptoms of PTSD despite the fact that they were not directly exposed to the incident and were not related to anybody who had been killed or injured in that incident.[12] No association was found between parents discussing with their children the World Trade Center incident and the children's level of stress symptoms.[13]

Psychopathology following a terrorist incident may largely depend on two factors. The first is the degree of personal exposure to the event and its immediate sequelae (e.g. the death or serious injury of a loved one, and exposure to gruesome sights). The second is the individual's own level of personal vulnerability (e.g. concurrent life stresses, female gender, and previous psychiatric history). Children in particular may also be more vulnerable to contaminants (see 'Chemical, Biological, Radiological and Nuclear incidents' below) because of their higher respiratory rates and greater skin/surface mass ratio. Dybdahl[14] emphasizes how children's reactions are likely to be shaped by those of their parents.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR (CBRN) INCIDENTS

The prospect of such an incident has attracted much interest but because, through the use of conventional explosive devices, terrorists have been 'successful', there is no obvious reason why there should be a sudden preference for CBRN materials.

Radiological and nuclear agents are a new source of threat, but chemical and biological ones have seen long service as weapons of war and as means of inducing terror. The Pilgrim Fathers used smallpox-infected materials against the indigenous tribes of North America, and bubonic plague-infected corpses were launched by cannon against the Genoese in the mid 14th Century.[2] More recently, toxic gases have been used (not very successfully) in The Great War, and the infamous Unit 731 of the Japanese Army tested out (against the Chinese) the use of anthrax, typhus and cholera during The Second World War. In the US State of Oregon in 1984, the Rajneeshee Cult sprayed 10 salad bars with *Salmonella typhimurium*[15] and chemical weapons were used by Sadam Hussein against the Kurdish populations in Iraq. The Japanese cult, Aum Shinrikyo led by Shoko Asahara, used sarin gas against the citizens of Matsumoto and, in the following year, they left canisters of the same gas in the Tokyo underground. Fortunately, their dispersal methods were amateurish, and only 19 individuals died in total in these two incidents. Nonetheless, such attempts raised new anxieties and raised the level of terrorist threat.

CBRN weapons may offer terrorists certain advantages:

- Many are cheap to produce
- Most agents cannot be detected through the senses
- They are mysterious and unpredictable (at least to the laymen)
- Their effects may be distant in time
- The epicentre of the incident may not be easily established
- There is no clearly defined 'low point' from which things will improve.[16]

In their choice of agent, Boulton[17] suggests that terrorists, to minimize their inconvenience and to maximize the effects, will be influenced by such factors as those agents which have a short incubation period, produce illness and disease in populations with low immunity, and are difficult to treat, stable in storage, and easy to disseminate.

MASS PSYCHOGENIC ILLNESS

'Mass psychogenic illness' has been defined as follows:[18]

> 'The rapid spread of illness signs and symptoms affecting members of a cohesive group, originating from a nervous system disturbance involving excitation, loss or alteration of function whereby physical complaints that are exhibited unconsciously have no corresponding organic aetiology'.

After a radiation accident in Brazil[19] and the Aum Shinrikyo incident in Tokyo[20] many individuals feared that they had been contaminated and sought medical assistance. After the Tokyo incident, the ratio of those who had sought medical reassurance, fearing that they had been contaminated (but were not), to those who had been contaminated was 450:1. Any major incident plan must, therefore, identify how such individuals will be dealt with. They will have to be dealt with empathically and non-judgementally.[21]

OTHER TYPICAL REACTIONS

Reactions to terrorist incidents have not been well documented, but there is an extensive literature on how individuals and communities typically react to major trauma. Most reactions at the early phase post-trauma are normal; few individuals display florid psychopathology. Normal reactions include the following:

- ★ Emotional
  - shock, numbness, denial
  - fear, anxiety
  - helplessness, hopelessness.
- ★ Cognitive
  - disorientation, confusion
  - intrusive thoughts, images, memories
  - hypervigilance (i.e. increased sense of risk)
  - impaired concentration and memory.
- ★ Social
  - withdrawal
  - irritability
  - loss of trust and faith
  - avoidant behaviour (i.e. of any reminders of the event).
- ★ Physical
  - autonomic hyperarousal
  - insomnia
  - loss of energy.

Imbedded in this list of 'normal' reactions are the core symptoms of PTSD, viz., intrusive experiences, hyperarousal (hypervigilance), and avoidant behaviour, as defined in the ICD-10 *Classification of Mental and Behavioural Disorders* (ICD-10; WHO).[22] This is because, for a formal diagnosis of PTSD to be made, such symptoms must have endured for '. . . a few weeks'. (The fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* [DSM-IV] similarly requires such symptoms to have been present for one month.[23])

COMMUNITY RESPONSES

A community is more than the sum of its constituent individuals; community reactions may have their own distinctive profile. Tyhurst provided a three phase model of community response.[24]

Phase I

During this phase most individuals are likely to be stunned, numbed or even in denial. Denial followed the 'anthrax' scare in 2001 among the office staff of Capital Hill, Washington, DC; employees took some considerable time to realize they might have been exposed to a toxic substance.[25]

Widespread panic is not a typical reaction (despite it being widely depicted in 'disaster films', etc.). Only about 10% of victims are likely to panic, and this reaction is most likely when victims believe they are trapped and helpless.[26] In the 1987 King's Cross underground fire most passengers did not panic; they tended to seek out the usual methods of entry and egress.[27] Similar personal accounts have been provided after the London terrorist incidents of July 2005. This provides another clear message for civil contingency planning: the latter should not be based on ill-informed assumptions about human behaviour. Even *in extremis* human behaviour can be rational, altruistic, and even heroic.

The Recoil Phase

During this phase, individuals seek to make sense of what has happened. They seek reunion with their usual sources of support, e.g. families, friends and colleagues. *Ad hoc* groups may also develop as individuals seek succour and mutual support. At this time the community quests a sense of order and control, and the authorities can do much to facilitate this. Tragically, what happened after hurricane *Katrina* demonstrates what results when the authorities fail to impose order and control.

The Recovery Phase

This is characterized by alternating episodes of adjustment and relapse and there may be obvious examples of resilience and positive outcomes. Much has yet to be learned about how communities cope with chronic exposure to threat and adversity, but Jones and his colleagues[28] have re-evaluated the social effects of air raids in Great Britain during the

Second World War. Their findings suggest a high level of civilian resilience. Similarly, various authorities have commented on the apparently low level of violence-related psychopathology reported in Northern Ireland during the 'Troubles'. It remains unclear, however, what are the protective factors: it could be extensive denial, social cohesiveness, a united front against a common enemy or some other as yet undetermined influence(s).

WHAT MAKES A TERRORIST?

As Martin and Wright (cited in Gunaratnam *et al.*[10]) have emphasised, the term 'terrorist' is a convenient one to stigmatize our adversaries. It is not difficult to understand why events such as the destruction of the World Trade Center, the Bali nightclub bombing, the car and suicide bombings in Iraq, and the events in London of July 2005, incite public outrage and encourage politicians and other lead figures to rival each other in their expressions of condemnation. However, emotional catharsis of this kind does not take us far in our effort to deal with terrorism. Perhaps we need to view this phenomenon not through a moral prism but through a psychosocial one. This not an easy challenge, and mental health specialists are more comfortable dealing with the impact of terrorist activity than with the motives and the psychological makeup of those who perpetrate such incidents. There are many convenient myths about terrorists and about 'suicide' bombers in particular. The latter term is a misleading misnomer, perpetuated mainly by the media.[29] It is not 'suicide'; it is an act of faith and martyrdom suffused with religious and/or political motives. According to Pape,[30] over 95% of suicide terrorist attacks have occurred as part of a strategic campaign to force the withdrawal of foreign military forces from an occupied territory where religious differences exist between the occupier and the occupied.

The following are some realities about terrorists:

- Most terrorists are not mentally ill, and most do not have violent or psychopathic personalities (such individuals would find it very difficult to remain covert as part of a 'sleeping cell')
- Not all terrorists come from impoverished or disadvantaged backgrounds (e.g. Osama bin Laden and the Badder-Meinhof group). Disadvantaged environments are more likely to produce sympathisers than terrorists
- Not all terrorists are religious fanatics, and many belong to secular groups (those who do belong to extremist religious groups may be motivated by the prospects of immortality and the rich rewards following their ascendancy)
- Terrorists are not typically 'brain-washed' or coerced into terrorist activity, although there is often a charismatic and inspirational leader
- There is now a move to involve females. Also, children as young as 12 years have been recruited by the Tamil Tigers of northern Sri Lanka. (A recent survey[31] alarmingly confirmed, from a survey of school children in Gaza, that 70% wished to become a *shahid* in a self sacrificing act of martyrdom)
- Regularly found among terrorists are: poor self esteem, a sense of hopelessness, shame, a need for revenge, and a sense of vulnerability.

THE MEDIA

Many commentators have referred to the symbiotic relationship between the media and terrorists. Martin Bell,[32] the distinguished journalist, aptly described this relationship with regard to television in the following fashion: 'Terrorism and television feed the frenzy of each other's appetites'.

'Bad news' sells newspapers and boosts radio and television ratings, and terrorism waxes comfortably on extensive media coverage. This relationship cannot be ignored, and it must be reflected in any major incident plan that purports to address systematically the consequences of a terrorist incident.

Research on the impact of the media is patchy, but there are understandable concerns about the risk of the media 'retraumatizing' those who were victims of an incident or at least causing unnecessary distress in viewers (children in particular). There is a need to embrace the media in the overall strategic response to terrorism, particularly because they are singularly well placed to disseminate widely and persuasively vital information about what has happened, what are 'normal reactions', when to seek help, and from where help can be obtained.[33] The challenge is for the media to identify those spokespersons who would have widespread credibility. Presentations by the authorities after the sinking of the nuclear submarine, the *Kursk*, and after the Chernobyl nuclear incident, gave rise to considerable concern. Information that was imparted was clearly duplicitous with regard to the first incident, and inappropriately delayed with regard to the second.[34] Researchers have highlighted how complex is the interaction between the general public and the authorities, and have provided examples of successful attempts to communicate with the general public.[35]

WHAT IS AN APPROPRIATE MENTAL HEALTH INTERVENTION?

Certainly, an overreaction reflected in terms of '. . . trained counsellors are standing by . . . ' (a phrase much loved by

the Press) is not helpful. (Who asked them to stand by and to do what?) Much has been written about the need for selective and circumscribed responses following major trauma, including terrorist incidents.[36,37]

Psychological First Aid[38] is widely considered by specialists and by the NICE Guidelines[39] to represent a comprehensive and realistic but non-intrusive strategy following major trauma. It is an approach which does not 'pathologize' early post-traumatic reactions; it seeks to facilitate family and social supports, and to satisfy basic needs for food, security and information. The NICE Guidelines also refer to 'watchful waiting' over the first few weeks after trauma in order that survivors can come to terms, through their own means, with what has happened. Premature psychiatric heroics may jeopardize individuals', families' and communities' ability to cope. Also, the mental health services have no monopoly of the power to ease suffering.[40] Much can be done in the acute phase through psychoeducation, crisis intervention, and support provided through various agencies, including the social services, the Church, and schools. The main aim should be to promote resilience.

CONCLUSIONS

Terrorism, whether by conventional or CBRN methods, represents a high yield but low cost strategy at least in terms of short-term gains. We cannot deny the reality of the risk, but there are definite reasons why we should not succumb to pessimism or helplessness. It is a highly controversial topic as evidenced by the reaction[41] to a recent article by Godlee.[42] However, we need to view terrorism dispassionately, particularly in terms of its causes.

There is no trauma, however abhorrent, which is guaranteed to cause long-term psychopathology in all those exposed to it. Most trauma specialists share the view that the psychological outcome, for individuals and communities, is resilience and not psychopathology. Moreover, trauma can create positive outcomes. These include greater community or familial cohesiveness, a more realistic appraisal of life values and priorities by individuals, as well as a greater sense of personal strength and self confidence.

Conflicts of Interest None.

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