

Chapter 16 – PSYCHOLOGICAL DISORDERS AND RESILIENCE IN THE AFTERMATH OF THE AMMAN TERRORIST ATTACKS

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Jordan has been the target of intended and actual terrorist attacks multiple times in the past fifteen years. Terrorist acts and their consequences represent one of the main challenges for Jordan as well for the wider world community which is also facing terrorism. The objective of terrorists is to strike fear into the community and thereby change the political process. Terrorists only gain their advantage when a community is harmed and gives in to fear. Therefore it is very important to understand what makes a community resilient to terrorism and for government and civil society to do everything possible to promote resilience to terrorism. In this paper resilience to terrorism is defined as the ability to cope with terrorism, remain adaptable and not lose significant life functioning (i.e., the ability to perform work, family, and other roles).

In November of 2005, three simultaneous suicide terrorist attacks carried out by al Qaeda occurred in three separate hotels in Amman immediately killing sixty victims and injuring another one hundred fifteen, many of them seriously. In one hotel a wedding was taking place and the parents of the bride as well as many guests were killed. These attacks, although preceded by other attacks in Jordan, shocked the entire nation. The shock was that the targets were purely innocent civilians, unconnected to the government and the Muslim perpetrators felt justified to kill other Muslims. Jordanian civilians did not understand why al Qaeda would target them.

Emergency services were provided and within three months of the accident, a time when acute stress responses should be calming in those who make a good adaptation, a study of psycho-social responses among the victims was carried out. The objectives of this study were to:

- Identify the psychosocial, and health impacts of terror acts on victims;
- Identify the presence of post traumatic stress disorder and co morbidity disorders among victims;
- Compare severity of (PTSD) symptoms among victims in two different periods of time (three months and six months after the event); and
- Identify the types and sources of resilience among Jordanian citizens.

16.1 METHODS

The sample consisted of thirty-seven Jordanian families exposed to the terrorist event(s) who were recruited to the study based on availability and willingness to participate. The methodology was to conduct a semi-structured interview and to administer a validated Posttraumatic Stress Disorder (PTSD) scale with at least one adult family member survivor from each family. The sample included forty respondents. They were of both Jordanian and Palestinian descent, all Jordanian passport holders. Their age range was seventeen to fifty-two years. There was also a control group of forty-seven officers, twenty-seven from civil defence (fire fighters) and twenty-one police officers who had been emergency responders at the scene of the terrorist attacks. This group was selected since their exposure was the same, but they were exposed in a professional

capacity and with training which may have equipped them for greater resilience in the face of a terror attack, as compared to the civilian sample.

16.2 DATA COLLECTION METHODS

The data was collected via a semi-structured interview developed specifically for this purpose. It was carried out by the author and his assistants, all of them trained social workers and psychologists. There was also a focus group of the interviewers as they collected data to gather feedback from them about the interviews and to improve the method of data collection as the interviews carried on. The interviews included administration of an Arabic version of the Posttraumatic Stress Disorder (PTSD) Questionnaire, which had its face validity established beforehand and which was based on the PTSD criteria outlined in the Diagnostic and Statistical Manual (Revised) Criteria of the American Psychiatric Association [1].

16.3 RESULTS

The results of the interviews were thus both quantitative and qualitative. We report first the quantitative results below.

16.3.1 Negative Social Consequences

For some victims there were serious negative social and economic consequences initiated by the terrorist attacks. For instance, four victims lost their homes due to losing the main breadwinner or as a result of a reconstituted family structure. In this latter case, a widow was demanded by her husband's family members to leave with her children after her husband was killed. Another family began serious conflicts because a family member had attended the wedding party and been seriously injured but her father did not even know she was going out and he blamed the mother for the tragedy. Likewise, there were many losses in families of parents and siblings, with one family losing five members. In these cases psychosocial and financial support was offered to the families by the Jordanian Association of Family Protection Against Violence (see Table 16-1).

Table 16-1: Number of Family Members Who Faced Negative Social Consequences.

Negative Social Consequences	Number of Families 37
Loss of home	4
Family conflict	2
Loss of father or mother	12
Loss of brother or sister	12

Family members also faced severe negative economic consequences as a result of the terrorist acts. For instance twelve lost their jobs due to physical disabilities, although with the support of the JSPFV ten of them found jobs after some time. Even a staff nurse confined to a wheelchair as a result of paralysis and inabilities to perform her duties. However, she was supported to become a teacher in a nursing college in King Hussein Medical Center. Some families also lost their primary breadwinner and others did not lose their jobs but couldn't work for a period of time. With the support of the NGOs and the government there was a significant reduction in these consequences over time.

Table 16-2: Number of Family Members Who Faced Negative Economical Consequences.

Negative Economical Consequences	No. of Families 37 After Two Months	No. of Families After One Year
Loss of job	12	2
Loss of financial support	18	5
Loss of ability to continue work due to physical problems	5	2

Number of Family Members Who Suffered from Health and Psychological Problems

Health and psychological problems were also significant factors. Paraplegia, loss of eyes, bodily injury, loss of limb, and psychiatric disorders were all present. In Jordan psychological disorders are stigmatized and therefore some cases were hidden and family members refused to receive help from psychologists and psychiatrists.

Educational problems also occurred. Students were unable to resume their studies due to health and financial problems but overtime donations and school support diminished this result. In one case an eight year old boy who lost his mother could not function in school and developed separation anxiety, clinging to his father. After one year of treatment, he did resume school.

Table 16-3: Number of Family Members Who Suffered from Health and Psychological Problems.

Health and Psychological Problems	Number of Families 37
Paraplegia	2
Loss of eye	2
Body injury	16
Loss of limb	2
Psychiatric disorders	22

Number of Family Members Who Faced Educational Problems After Two Months, and One Year

There were also psychological effects from the terrorist attacks. All of these were clinically diagnosed by psychiatrists and psychotherapists. The diagnoses included generalized anxiety disorder, panic disorder, depressive reaction, conversion disorder, somatization, PTSD, and specific phobias. All of these fall under the umbrellas of posttraumatic responses and are to be expected. Re-experiencing the trauma, avoiding stimuli (e.g., returning to any parties), and hyper- arousal were common.

Table 16-4: Number of Family Members Who Faced Educational Problems After One Year.

Student Unable to Resume Their Studies in Universities	No. of Subjects 37 After Two Months	No. of Subjects 37 After One Year
Student unable to resume their studies in universities and to school due to financial Students unable to get back to school due to financial problems	9	0
Student unable to resume school (school refusal)	1	0

Table 16-5: Psychological Effects of Terrorist Attacks.

Psychiatric Disorders	No. of Subjects 40	Percentage
Generalized anxiety disorder	12	30%
Panic disorder	1	2.5%
Depressive disorder	3	7.5%
Conversion disorder	1	2.5%
Somatization disorder	8	20%
PTSD ¹	16	40%
Specific phobia	5	12%

Table 16-6: Comparison Between Victims and Control Group in Severity of PTSD Symptoms.

Symptoms of PTSD	Victims Groups (#40) Mean-(sd)	Control Groups (#47) Mean-(sd)	F-value p
Re-experience	13 (3.4)	8.7 (3.0)	34.1 <.001
Avoidance (PTSD)	15.8 (4.6)	10.7 (2.9)	20.2 <.001
Arousal (PTSD)	14.6 (2.7)	8.9 (2.5)	27.0 <.001

¹ The criteria for Posttraumatic Stress Disorder included the traumatic event and measured for re-experience, avoidance and hyperarousal.

Table 16-7: Number of Victims Who Suffered from PTSD During Two Different Periods of Time – Severity of Symptoms Among Victims After One Year of Traumatic Event on PTSD.

Symptoms of PTSD	#40 (Two Months) Mean – (sds)	#47 (One Year) Mean (sd)	F- value p
Re experience (PTSD)	13 (3.4)	11.25	2.66 <.01
Avoidance (PTSD)	15.8 (4.6)	13.8	1.75 <.08
Arousal (PTSD)	14.6 (2.7)	10.3	5.22 <.001

Consequences of the Traumatic Event on the Jordanian Community

Comparison of posttraumatic stress responses of the victims to the control group was also interesting. In general the controls (officers and rescue workers) had less negative responses, although both groups evidenced classic posttraumatic stress symptoms for some of the respondents. Using t-tests it was shown that the resulting differences between the two groups were significant. In the second assessment twelve months after the events the severity of symptoms among victims was on average decreased in all cases with the most significant decrease in arousal symptoms. Re-experiencing also was significantly decreased and avoidance moderately so.

Qualitative results were collected as well in the interviews – some general conclusions about the society’s wide effects are included here based upon observations of the Jordanian society in the aftermath of the attacks.

As with all terrorism, the victims were relatively few, but the consequences spread quickly throughout the Jordanian society in multiple ways, of course magnified by the media exposure to the explosions. It was shown on – television for weeks and the events dominated news and magazines as well.

Observed effects of the terrorist attacks on Jordanian society included that Jordanian citizens felt threatened and unsafe, especially children. This observation has occurred in many other terror attacks, as well with adults and children far – from the attacks observing it on television and developing acute and posttraumatic responses [1],[3],[4],[5]. Unfortunately rumors focused on new terrorist targets – the city mall, the shopping centers, American businesses (i.e., McDonalds) – were spread, causing fear and avoidance as well. As a consequence many people started avoiding hotels and parties in public places, an effect that has now diminished given no more serious terror attacks in Amman. Thus this traumatic event has temporarily disrupted the life of citizens and negatively influenced the Jordanian economy.

Looking at the victim families some, approximately twenty percent, blame the government for not taking precautionary measures at hotels. After this time the Jordanian government and the hotels all have serious security measures.

Some victims who survived the event exhibited guilt feelings, which are typical to posttraumatic stress. For instance one father whose daughters died expressed guilt and regret for allowing them to attend to the wedding where they were killed. Another injured woman wished she had died instead of her daughter.

16.3.2 Psychological Challenges of the Traumatic Event

There were many challenges of the traumatic event on a psychological level. For instance the psychological management of the traumatized victims lacked adequate experience by psychologists and psychiatrists. There was a lack of proper coordination between the team members of the mental health profession.

Although the number of traumatized citizens was high we had difficulty in determining the exact number of those who suffered from psychological disorders. This was due to the following factors: many victims and their families as well as some medical staff exhibited lack of knowledge about what are normal and abnormal reactions to crisis. Likewise many victims and their families who manifested psychological and psychosomatic symptoms, showed a lack of awareness about the role of psychologists and psychiatrists. Eight cases refused to be referred to psychiatrists or psychologists in order to avoid stigmatization despite serious symptoms. Four cases totally denied any psychological problems although they were clearly exhibiting serious psychological symptoms. Four cases who agreed to receive psychotherapy showed a lack of cooperation and commitment. They came just once and wanted medication only.

Our study was aimed at in examining the psychological disorders that resulted but also examining the types and sources of resilience in Jordanian families. It is very important to understand what sources of resilience the civilian population turns to in times of traumatic events so that government and civil society can take actions to support these sources and thereby enhance resilience to terrorism.

16.3.3 Resilience to Terrorism

It is necessary to define resilience to terrorism in order to study it. For our purposes we defined resilience as a dynamic process of adaptation and development while simultaneously facing a significant amount of adversity [6] (Luther and Becker, 2000). For an individual to be resilient he should not demonstrate significant negative symptoms nor lose significant life functions (the ability to work, perform family roles, etc.) and he should find a positive adaptation in the face of distress.

The sources of resilience that were identified in this study include: family support, community resilience, friends and professional support, and religious beliefs. Each of these are discussed below:

- **Family Support** – The nature of Jordanian families is common to the Arab world in that they exist and function as extended families which are characterized by strong family ties, providing many types of support to family members. In the case of terrorist attack we found that Jordanian families provided the following important functions to victims: empathy; reassurance; help in debriefing from the events; and most importantly financial donations, health care and childcare support during the aftermath of the attacks. The family support socially and financially in some cases was so strong for their traumatized relatives that some even refused offers of help from the government.
- **Community Resilience** – There was also a great deal of community support for victims of terrorism and a strong sense of community resilience. This started from the top down with a great deal of compassion and support being offered to victims by His Majesty King Abdullah and Queen Rania. Likewise Jordanian citizens, similar to UK citizens after the London metro bombings were not newly acquainted to terrorism and insurgent violence, and therefore had some degree of established immunity. They were already united against terrorist acts and this event strengthened the sense of community outrage at terrorism and community cohesion because Jordanians felt the attacks humiliated their dignity and existence. There was a strong increase in cohesion and solidarity between all sectors of the national community and there was also an outpouring of altruism by a large number of volunteers who gave a variety of social, emotional and financial support. There was also an increase in the level of awareness among citizens regarding terrorism and its motivations. Lastly there was an initiation of collaboration and continuous dialogue between government and NGOs to fight terrorism and to work together successfully to increase resilience to terrorism among Jordanians.
- **Friend and Professional Support** – Friendships and team members provided all types of support. There was a positive role for NGOs especially the Jordanian Society for Protection Against Family

Violence which established- peer supportive groups and a hot line. Mental health professional support and spiritual support by religious figures also played an important role in supporting resilience.

- **Religious Beliefs as a Source of Resilience** – It was noticed that victims and their families who are religious proved to have less psychological disorders and high resilience. Religious Muslims often believe that innocent victims of terrorism are considered martyrs. Likewise, there is a strong belief in the benevolence and goodness of Allah and the destiny provided by Allah. Therefore, there is a strong religious and cultural value that encourages trust, patience and tolerance in adversity and trust that Allah will provide. Two Qur’ān [7] verses in particular encourage resilience:

Surah 1. Al Bakarah (The Albaqura) 156 – Which says, when afflicted with calamity:
“To Allah we belong, and to him is our return.”

Surah 9. Al Tawba (Repentance) 51 – Says: “Nothing will happen to us except that Allah has decreed for us: he is our protector”: and on Allah let, the believers put their trust.”

16.4 DISCUSSION

The results of this study were many. First of all it was clear that it’s possible to study victims of terrorism in Jordan and that they will participate in interviews and even posttraumatic measures. Clearly they had many negative effects and civilians suffered more than the controls but Jordanian citizens also showed high resilience, likely due to the society’s wide support offered to the victims on multiple levels as discussed in the result section.

There were many lessons learned from this traumatic event. For instance the Jordanian government established new strategies which were aimed at focusing more on pre incidence and preparation for psychosocial support from all different sectors in the event of another terrorist attack. They also provided more security procedures for hotels and public gatherings. They also established a national strategy for humanitarian support network for crisis consisting of both government and NGOs. There was also more focus on raising awareness of terrorism and its effects by using various sources such as media, mosques, schools and establishing society wide terrorism prevention programs. Crisis intervention centers were also established in the police, civil defence, army and other sectors that deal with crisis. Lastly support training courses in advanced psychological intervention for victims of crisis were developed.

A recognition that occurred as a result of these attacks was also that Jordan can benefit as well as give a lot in cooperation with other countries and organizations such as (NATO) in order to exchange experiences in prevention and psychosocial intervention.

16.5 REFERENCES

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