

## Enhancement of Family-Based Community Resilience during Disasters Caused by Natural Hazards and Massive Civil Emergencies

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In most communities, the ability to prevent or to cope with disasters and the recuperation of the community depend, among other things, on community resilience. *Community resilience* can be defined as the capacity to cope with and rebound from massive crises; to continue with current and future community projects, thereby maintaining and enhancing the quality of life. In short, community resilience reflects the on-going growth in the face of adversity. (Inbar, 1994)

*Family-based community resilience* (FBCR) focuses on family resilience, which can increase essential factors of protection, the capabilities and abilities for prevention, coping and recuperation factors, and rehabilitation. *Family resilience* is defined “as the capacity to rebound from adversity strengthened and more resourceful. It is an active process of endurance, self-righting, and growth in response to crisis and challenge”, (Walsh, 2002).

Professionals in the area of prevention of and coping with disasters have questioned why, in the face of adversity, some communities are more resilient than others. This study focuses on the idea that the main social unit that copes with these adversities is the family. It is the family that transmits and communicates attitudes, beliefs, values, and also coping abilities and skills. This presentation offers a brief review of the FBCR model of community resilience based on family resilience, along with a reflection on the possibilities of implementation in different communities.

Today, there is substantial evidence and experience to show the benefits associated with the implementation of the main ideas of FBCR. It will be shown how to increase potential abilities, capabilities, and skills in preventing, coping with, and rehabilitating communities that suffer from disasters caused by natural hazards and civil emergencies.

**Keywords:** community; disaster; family-based community resilience; preparedness; resilience

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## Resilience of the Turkish Jewish Community in the Face of Terrorism

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**Background:** In 1986 and 2003, the Jewish community of Istanbul faced two terrorist attacks that have had long-term ramifications. Following the attacks, no psychological intervention or long-term support was provided by the municipality; however the community did provide its own resources. The Jews of Istanbul remain a potential target. Similar incidents in the future could affect catastrophically the fabric of the community.

**Methods:** This study used a 74- question questionnaire pertaining to the resilience of the community and employed two indicators, “avoidance behavior” and “public fear”. Responses (n = 210) were analyzed against “circles of vulnerability” and centered on exposure to the events with a focus on optimism, present fear and anxiety, relationship to community, sense of security, religiosity, and current behavioral patterns associated with everyday life.

**Results:** The 1986 events still affect resilience, and hint that a previous event does not protect the individual or community from dealing with future trauma. Professions, especially white collar professions, increased the amount of “avoidance behavior” in context with the “circle of vulnerability”. In addition, results indicated that higher education translated into lower resilience. Age primarily influenced “public fear”, and the age interval of 30–39 years proved least resilient. Gender did not directly or indirectly influence resilience; this was in contrast to current research that shows that gender differences exist in regards to the ability to cope, and that gender is related significantly to the level of stress.

**Conclusions:** The influence of terrorism does not dissipate over time, and thus, it is necessary to create awareness in communities regarding preparation and response.

**Keywords:** behavior; community; fear; psychological; resilience; terrorism; vulnerability

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## Should Civilian Staying Power be a Consideration in Deciding to Evacuate a Hospital?

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During national emergencies, the Ministry of Health (MOH) is responsible for orchestrating the response of the healthcare system. Over the past three years, the issue of evacuating a hospital was debated twice. The authors are not aware of any research on the effects such an evacuation would have on the staying power of the affected population. Should civilian staying power be a consideration in the MOH’s decision to evacuate hospitals?

During the 2<sup>nd</sup> Lebanon War, the Mizra Psychiatric Hospital suffered a direct hit by a Lebanese missile. Though the damage was limited, the hospital had no structural protection, and therefore, evacuation was undertaken. The civilian population in the region was not evacuated. The MOH considered the issue of staying power prior to the decision to evacuate the hospital, including the needs of the population, psychological impact of evacuation on the community, consequences for transferring patients to other facilities, and the potential danger to patients and staff.

During the Gaza incursion, a single salvo of missiles was fired at the city of Nahariya, far distant from the conflict zone. The population of the region was not ordered a prolonged stay in shelters. The Nahariya hospital’s administration requested a directive from the MOH to evacuate patients to underground shelters sufficient for approximately two-thirds of the patients. The decision of the MOH was not to evacuate the hospital.

Social fortitude impacts on decision-making during emergencies, and should be integrated in response plans based on: (1) ongoing evaluation of the status of the healthcare system; (2) up-to-date information regarding risks and potential consequences; (3) mechanisms for supporting decision-making; (4) supervision over-implementation of decisions made; and (5) flexibility for modifying decisions according to the evolving situation. The Israeli MOH's position is that all measures should be taken to avoid evacuation of medical institutions during emergencies.

**Keywords:** civilian population; evacuation; hospital; Ministry of Health; staying power

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### Coping with Emergency Situations during Operation Cast Lead—Nurses at Soroka Hospital

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**Introduction:** During the conflict of the Cast Lead offensive, life in much of southern Israel, including Beer-Sheva, the Negev capital, was paralyzed. Thousands of Israelis were within the striking range of Hamas rockets. Schools and universities closed temporarily due to rocket threats. Residents, especially mothers and children, left their homes. The ambiguity of the situation caused episodes of anxiety and depression. During the situation, wounded soldiers and injured civilians were evacuated to hospitals. Nurses worked intensively around-the-clock, and were exposed to numerous stresses.

The objectives of this prospective study were to identify and compare changes in staff anxiety and depression levels during and following the war period over a two month period during and following the crisis. In addition, the effect of the hospital's organizational climate on nurses' emotional and physical state was examined.

**Methods:** A total of 314 nurses with a mean age of 42.2 years were studied. The generalized anxiety disorder and depression screening tests were used twice as study instruments.

**Results:** For approximately 25% of the hospital nurses, the war period was their first confrontation with an emergency stress situation at work. Approximately 68% were requested to work overtime. A total of 59% appreciated the hospital's ongoing, updated information about its security and safety arrangements. The correlations between a sense of organizational solidarity (SOS) were strong ( $p < 0.0001$ ) and highly negative with anxiety and depression. In turn, the correlations between SOS with a sense of physical and mental relief were strong and highly positive. The anxiety and depression levels were moderate and were decreased significantly two months later.

**Conclusions:** The war situation affected the nurses' emotional and physical state. Constant updates of hospital data enhanced a sense of cohesion, reduced stress, raised motivation, and improved a sense of belonging.

**Keywords:** coping; emergency; nurse; Operation Cast Lead; stress

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### Consolidating a Resilience Network to Boost Civilian Resilience during Emergencies

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**Introduction:** Israel's current security conditions could endanger the Israeli home front to the point that it would face a "national crisis". Such a crisis would expose the majority of the population to severe physical danger and shortages and compromise the resources and capacities of governmental agencies attending to the needs of the population. Therefore, Israel must consolidate a network of thousands of civilian nodes in order to enhance local and national resilience. Developed within the Israeli context, this model can be adapted to any global situation that calls for community-led emergency preparedness.

**Methods:** This strategy is the outcome of a joint research project between the Reut Institute and the Israel Trauma Coalition, under the sponsorship of the UJA-The Federation of New York. The research was based on meetings with dozens of Israeli experts in all relevant sectors, including government, local authorities, businesses, non-governmental organizations (NGOs), media, and academia. In addition, the Israeli home front performance during the 2<sup>nd</sup> Lebanon War and Operation Cast Lead, and comparative international research of approaches to resilience in the US, Singapore, Japan, South Korea, Australia, Sweden, and the UK was reviewed.

**Results:** The strategy for coping with national crises is based on organizing society—individuals and households, corporations, NGOs, and educational and public institutions—as a Resilience Network that is based on a "Culture of Preparedness". The Resilience Network can be mobilized quickly and at low cost, since most of the required resources already exist within the aforementioned sectors of society. A Resilience Network can contribute to the successful response to emergencies in Israel and worldwide.

**Keywords:** civilian; emergency; network; resilience

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### Information Systems in Mass-Casualty Events and Disasters

#### OSIRIS C3—On-Site Instant Report and Information System

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**Introduction:** Disaster management and emergency response can reveal the best and the worst of any organization. As links in a chain, if one could pinpoint five critical areas with major impact in disaster outcome, most people would name: (1) planning; (2) training; (3) command; (4) control; and (5) communications. Internationally, governments and emergency managers rely on a multitude of systems to provide for these critical processes.

**Methods:** Four major, leading companies in their fields of expertise collaborated on an idea to innovate and develop a tool for 21<sup>st</sup> century emergency management and disaster response. The solution had to incorporate lessons learned