

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/285863441>

Community coping: Resilience models for preparation, intervention and rehabilitation in manmade and natural di....

Article · January 2008

CITATIONS

7

READS

83

2 authors, including:



Mooli Lahad

Tel-Hai Academic College

47 PUBLICATIONS 295 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



the project I just finished and was recently published is my newest (35Th book) [View project](#)

Chapter 12

COMMUNITY COPING: RESILIENCE MODELS FOR PREPARATION, INTERVENTION AND REHABILITATION IN MANMADE AND NATURAL DISASTERS

Mooli Lahad¹ and Uri Ben Neshet²

INTRODUCTION

This chapter will focus on the various systemic models that have been developed in Israel since the 1980s, in response to the needs of the population during emergency situations, and will point out those areas not currently covered by those models. Based on this analysis, we will propose a multi-dimensional or meta-model that is a blueprint for future responses. We will also provide recommendations for maintaining and developing community resilience, in light of the research and current practice in this field.

RESILIENCE MODELS FOR PREPARATION, INTERVENTION AND REHABILITATION

To provide information for community systems, Lahad (1999) created an observational questionnaire to formulate a comprehensive picture of the community resiliency measures. This questionnaire is based on the integrative resilience model originally developed for individuals and families (Lahad, 1997b, 1997c). This model, known as the BASIC PH model (Ayalon & Lahad, 2000, Lahad, 1993) provides a summary, from a meta-perspective, of the resilience theories and research over the past three decades and distills it into an integrative model that describes the components of resilience and coping in individuals and systems.

The clusters of theories that were identified by Lahad (1999) are organized in six groupings, as follows:

1. Belief – beliefs and values, self-image, hopefulness, meaning and mysticism.
2. Affect – personal and interpersonal emotional resources, verbal and non-verbal resources.

¹Professor Mooli Lahad – Director of the Community Stress Prevention Center, the Tel Hai Academy
cspc@telhai.ac.il

² Dr. Uri Ben Neshet – Organizational Consultant, Human Resource Development, Emergency Preparedness Specialist uri@ben-neshet.com

3. Social – components of assuming a task, sense of belonging, the desire to be part of a group and to function within it and for its benefit, drawing strength from belonging to a system and organization.
4. Imagination – characterized by use of fantasy, diversion of attention, creativity, improvisation and humor.
5. Cognition – logical, realistic, characterized by a need for knowledge, gathering and processing of information, thoughts about alternatives and priorities, learning from others' experience, rational thinking and ability to plan independently.
6. Physiology – being practical, "doing", activity, somatization, rest, relaxation and more.

Ascertaining resilient modes of the community/organization

The dimensions examined in the questionnaire to evaluate community resilience included: (A) The Value and Belief System; (B) The Level of Interpersonal Emotional Relationships in the Community and General Concern about Emotional Wellbeing; (C) The Attitude to the Social Organizational Component; (D) The Creative/Aesthetic Sphere; (E) The Thought, Planning and Organizational Spheres and Learning from Experience and Applying Lessons Learned; and (F) Physical and Recreation Activities. Each of these dimensions are expanded on further now.

The Value and Belief System. For example: Is the community identified with a specific ideology? In recent years, has it been actively involved in political/ideological issues? Is there an archive where the history of the community is housed? What is the degree of respect accorded to different cultures and traditions within the community?

The Level of Interpersonal Emotional Relationships in the Community and General Concern about Emotional Wellbeing. For example: Do the residents trust each other? What is the nature of the atmosphere in the community – anger, panic, hostility, trust in strangers? Do community members celebrate together? Grieve together? Organize commemorative events together and support each other in times of crisis?

The Attitude to the Social Organizational Component. For example: Is the elected leadership accepted? Does an alternative/historical leadership exist? Is the community socially and culturally homogeneous? Is it homogeneous with respect to age groups? What is the level of involvement in helping others on a daily basis? How high a priority is it? How many elderly people, children and other groups requiring special attention are there?

The Creative/Aesthetic Sphere. For example: How much does the community invest in public places and to what extent are they aesthetically pleasing? How many initiatives (private or public) for such community projects have been undertaken recently; in previous years? Is there investment in the artistic and decorative aspects of community events?

The Thought, Planning and Organizational Spheres and Learning from Experience and Applying Lessons Learned. For example: How structured is the organization of the

community? Are there written procedures for various topics (such as a code of regulations, etc.)? Do community services exist (such as a cultural center, health funds, preschools, schools, local grocery stores)? What is the maintenance level of the private homes in the community; the public buildings? Is there a model/code for procedures in the event of an emergency? Are there drills of these procedures and if so, are they evaluated so that conclusions can be drawn and procedures can be changed accordingly?

Physical and Recreation Activities. Are sports events held (such as marches, competitions)? Is there sports equipment in the community (such as a swimming pool, gym or playing fields)? Are they used?

The resilience profile of a community is based on an analysis of those areas in which there are activities and involvement. Those areas with significantly high levels of activity are identified as the resilient modes of the community/organization. As such, the preliminary intervention in an affected community should both focus on, and be based on, these modes, whereas the rehabilitative interventions, the goal of which is to develop areas where resilience is weaker or undeveloped, should be undertaken at a later stage.

Some models, in particular, which are of direct relevance to natural disasters, are the Israeli models for community coping in times of crises.

ISRAELI MODELS FOR COMMUNITY COPING WITH CRISIS AND CATASTROPHE AND STRENGTHENING COMMUNITY RESILIENCE

There are various Israeli models for community assistance and support that are designed to minimize damage, provide assistance to communities and restore their ability to function in the event of a catastrophe or an emergency situation.

This section overviews a number of models that evolved from the original model of the Community Stress Prevention Center's work in building the Emergency Preparedness town model in the 80s (Shacham, Lahad, Sela & Shacham, 2003). A model for local authorities specifically for isolated settlements or for regional councils under threat, is called the Community Emergency Teams (CETs) (Cohen & Gilad, 1997) (and this will be expanded on in the next section of this chapter). A further model is the cascade model using the concept island of resiliency, the "Diamond Resilience Model" for developing systemic, organizational and family resilience (Ben Neshet, 1985) as well as an additional model for community resilience centers.

All the models mentioned share the same basic assumptions which are set out below:

- Citizens have resources. It is important to identify them in advance, to direct them and to activate them so that they will facilitate functioning in the event of an emergency, or, as the Home Front Command puts it "to help them to help themselves" (Ben Neshet, Gidron & Sha'anani, 2003, p. 13).
- The local authority is charged with the responsibility to provide residents with assistance in all areas. In general, this refers to psycho-social assistance.
- The local authority should be responsible for the professional spheres which it is better suited to handle, than are outside systems such as the army or central government. The

local authority should have responsibility for providing for the ongoing needs of the population for logistic and psycho-social support and should set up information centers.

- Following the initial shock reaction, most people respond logically, recoup their strength and act to save themselves and those close to them. "Basic, direct, accessible assistance and the encouragement of natural support systems (extended family, friends, community) can create significant, positive change in coping with the difficult reactions inherent in such events." (Ya'acov, 1997, p. 8)

Despite the fact that Israel did not face a major natural disaster, the Diamond model and the cascade model have been successfully applied both in following the 1999 earthquake (Ayalon O. Lahad, M., Cohen, A. Niv, S. & Shacham, Y. (2003) Ayalon, 2005) and the 2004 Tsunami in Sri Lanka (Lahad & Horwitz, 2005). Still none of the models surveyed here provide a response to a scenario where there is a chemical or biological disaster. In addition, there are no models for implementing the transfer of responsibility and treatment to the citizens themselves following an expectation of difficulties on the part of central or local government to provide a "personal" response to the problems of the individual.

A new trend that has been operationalised in the field is the model of a community resilience center that was proposed by the Ministry of Welfare (2003) and will be presented at the conclusion of the following section.

The Community Emergency Team Model (CET). This model is based on the assumption that there may be disaster scenarios in which it may take some time before the regional authority will be able to send assistance. This time lapse may be critical, certainly from logistic, defense and health perspectives, and in different scenarios, such as loss or siege, even from educational and psycho-social perspectives. The teams comprise volunteers from the settlement/neighborhood, both professionals and non-professionals, who organize to manage the settlement in the event of an emergency. Their tasks include assuming responsibility for crisis intervention and control, identifying affected individuals, operating internal support systems and implementing community rehabilitation programs. In order to carry out these functions, the Community Emergency Teams include: a team leader; an individual responsible for security who works with designated security volunteers; an education center with accompanying educators and volunteers; a nurse or doctor from among the residents (if, under routine conditions, the staff at the local clinic are not residents of the area); a logistics team to deal with immediate problems pertaining to water, electricity and infrastructures; community and welfare volunteers (usually social workers who are residents of the neighborhood, but are not necessarily employed by the local authority); information centers and spokespeople. Each team defines its tasks and responsibilities and implements them under the guidance of a coordinator from the local authority. The team is built up of small groups or links that are spread out over the neighborhood.

During an emergency, a headquarters team convenes to activate the volunteers in the neighborhood, in coordination with the headquarters of the regional authority and other external elements such as the home front, police, ambulances etcetera.

Preliminary data exist for the reactions of the CET volunteers to conditions of repeated, ongoing terrorist attacks. Brander (2001) surveyed the functioning of volunteers from 40 settlements in Judea, Samaria and Gaza after 2-4 months of the Palestinian Uprising or the Al Aksa Intifada. Findings showed that 94% of those interviewed expressed general satisfaction

with the functioning of the system, but 53% showed signs of burnout and fatigue, where most of the symptoms were manifested in a decrease in the ability to function as part of the emergency team, emotional and physical fatigue, an increase in the amount of time required to get organized, difficulty in fulfilling all the required tasks, physical and emotional stress, and reduced attendance at group meetings and activities. The reasons supplied by the team members for the preceding difficulties were: a team member who had moved away from the neighborhood, absence of a clear work structure for a situation of "ongoing emergency", ongoing stress and pressure, fatigue on the part of the rest of the team, apathy on the part of the residents and a decrease in cooperation. Brander's central conclusion was that the difficulties expressed derived from the fact that the CET teams were built according to an "isolated-event" model, or a model where there is a series of emergency events, separated by significant periods of time and taking place on different settlements. In practice, with the outbreak of the Al Aksa Intifada in October 2000, the members of the CET teams dealt with ongoing, overlapping events in which members of their communities were killed, often numbering among them children and infants. This situation placed a heavy burden on the volunteers and contributed to serious burnout.

The Cascade Model Building "Islands of Resiliency".

The cascade model main concept is based on the notion that, in order to reach out to the affected public, we need to build a system that is based on a few professional workers training semi professionals, who in turn train grass root volunteers to help the affected public and refer those in need to professionals for specialized help. This model is based on the work of (Ben Neshet 1997; Ben Neshet & Lahad, 2002), Ayalon (2005), and Sela (1996), and advocates that by training about 10%-15% of a given organization, we can make a positive ripple effect spreading psycho-education knowledge and thus enhancing the public's capability to help themselves.

Ayalon (2005) described in detail the work that was done in project HANDS (Helpers Assisting Natural Disaster Survivors) in Turkey following the 1999 earthquake. She described the process whereby a group of 20 professionals were trained by CSPC experts in community stress prevention and rehabilitation model. Following the "Cascade Model", this group in turn trained 20 professionals who took it upon themselves to each treat at least 14 people. Thus, with a core group of 20 professionals, the cascade model out- reached to 5600 beneficiaries. Ayalon described the training content as well as the dissemination process concluding that this effort proved to be long lasting, because the professional group formed its own training modules and training center and still continues to train helpers in Turkey six years after the disaster. This same model was employed in Sri Lanka following the Tsunami of 2004. However, in Sri Lanka, the local trainers were comprised of a wider diversity than educationists and psychologists; this time the trainers were: medical doctors, psychiatrists, nurses, midwives, health officers, social workers, teachers, principals, community workers, and monks. The concept is that the trainers themselves will make an interdisciplinary group and develop an integrated community approach.

Community Resilience Center Model – Ministry of Welfare (October 2003).

This model proposes that, in response to the need to cope with ongoing stressful situations with a view "to developing and advancing community activities, to improving resilience, and to treating crisis situations from an interdisciplinary vantage point, that seeks to galvanize a community's potential and to encourage residents to act to change their situation, to take responsibility, to be active participants and to help themselves and others to

develop coping resources under the direction and supervision of the welfare services in cooperation with other bodies" (p. 5). The center is intended as a focal point for the amassing of resources and for coordination between official bodies and local, regional and national voluntary organizations. The center is meant to be active in two areas: (1) treatment of the population in crisis and (2) improvement of community resilience and unity by recruiting and activating designated target groups and volunteers. The community resilience center will house an interdisciplinary assistance center and the following task forces: a security committee, community development teams to provide physical/psychological support, an emergency/trauma treatment team to treat special needs groups, absorption, community information and communication, an economic/social team, a fundraising team, an education team, a culture and leisure team and a training committee.

As stated, this model attempts to respond to the need to both preserve and develop ongoing resilience, as opposed to relating only to resilience in the context of the aftermath of a disaster. The model leads to empowerment by bringing together and coordinating the social and educational community resources and combining them with additional layers of the economic systems and voluntary bodies.

Beyond Improvisation

A survey of the scientific literature addressed herein indicates the need for preparedness to advance the resilience of communities under attack. However, in the absence of empirical research on the effectiveness of the preparations, we can only use the experience accumulated to date to ascertain the minimum requirements for an effective preparedness program, the principles for their differential application, the research needs in the area and which indices are relevant in order to develop the subject. The models developed in Israel are mainly directed toward two scenarios: A local emergency scenario (a contained act of terrorism, a local industrial disaster or a traffic accident) or a war scenario, in which the entire country is recruited for a war waged on a distant front. Many years of ongoing terrorism in Israel and the disaster that occurred in New York in September 2001 have altered the distinction between the home front and the "traditional" front and made it clear that there is a need to relate to a third, complex scenario in which one event or a series of events are engendered with the purpose of sowing death and undermining the psychological wellbeing of the citizens of a country.

When confronted by such a complex and vague scenario, one has no choice but to integrate the existing models into a meta-model comprised of independent and semi-independent units ranging from the level of the family unit to the level of the apartment building or neighborhood (similar to the CET model), via an interim structure comprised of local units capable of managing and providing assistance on the level of a number of neighborhoods (similar to a local administration), a cluster of settlements (community emergency team in regional councils) and above these, units on the level of geographical districts or bureaucratic districts that can manage themselves with minimal assistance from the central government. On this level, it is necessary to coordinate between local and higher levels with respect to food, fuel, water, transportation, health, education, and even internal security. The starting point for all levels of preparedness must be unity, as all these models rest on local resources. It is important to remember that individuals have good coping abilities and this message must be conveyed in advance.

In our opinion, it is important to stress, starting from the level of disaster preparedness, that one of its important goals is the creation of an infrastructure for dialogue and familiarity

between the different partners that provide interventions and are involved in the aftermath of a disaster. It is also important to emphasize that despite meticulous planning and preparedness there will be times when reality will dictate changes to the contingency plan. Therefore, the population should be assured in advance that this in no way indicates failure, but rather an acknowledgement of the limitations of the ability to predict all the possible repercussions of a disaster. Our experience shows that the more possible scenarios developed, the better the integrated preparedness of the emergency headquarters. Another widely-held conclusion is that the free flow of information and real time updates to the members of the affected community are vital to ensure the cooperation of the residents and their ability to follow instructions.

Consequently, a community emergency plan must include preparation of the media for scenarios in which they will function as a main source of guidance for citizens. Beyond logistics, it is important to focus on preparedness with respect to recouping lost resources, especially resources of social and psychological support. Since all the models emphasize confidence in the coping ability of the individual and the community (which is far more important than the quality of the coping), it is essential to prepare the leadership to provide empowering and reassuring activities with the help of the media. It is important to ensure that the citizens of the affected community believe that they are capable of helping themselves and their families and that additional assistance from the authorities is available to them, should it be needed.

Difficulties in testing models

Most of the disaster research concludes that the vast majority of residents of communities affected by disaster recover quickly and only a minority is adversely affected over time, to the extent that it is unable to function normally. We are of the opinion that the risk factors for ongoing psychological disorder are usually known and at least partially identifiable prior to the disaster (at-risk populations), and subsequent to it (based on the extent of the damage). One neglected area of research that in our opinion, is also very important to develop is the study of community or national resilience. An example of a subject of future research in this area is the study of the relationship between resilience within the family unit as a basic social unit and the resilience in the community as a whole. It is difficult to plan a study during a period of emergency. Consequently, it is important to develop readily-available research tools that can be activated within a reasonable period following the occurrence of a disaster. Development of tools to evaluate community resilience will facilitate controlled assessment of the effectiveness of the models. Since disasters in the same region, are usually rare occurrences, simulations may be used as research models to assess the quality of preparedness.

Of course one could easily imagine differences of opinion with regard to the role of the media during emergency situations (raising morale versus. critical, reliable reporting), but one must consider the opportunities for the media to have a constructive influence on the functioning of the community during a crisis and on a community's perception of its own resilience. This subject is in its infancy and planned and focused cooperation between community welfare agencies and the media during times of emergency cannot be taken for granted. However, Lahad (1997a), Ross (2003) and Ben Neshet (2001) have developed a model that focuses on the development of the ability of community information and communication teams to effectively utilize the resources of the mass media to transfer information, and guide and instruct the public during disasters or emergency situations (See Mc Mahon & McLellan, Chapter 7).

Of course, to implement such a model one must first identify the common interests of the media and of those who provide assistance to the public during an emergency.

The main limitation of this chapter is the absence of any reference to disasters that we have not yet encountered. We have no experience with chemical, biological or nuclear disasters. Disasters such as these are liable to damage extensive infrastructures (for example, through ecological pollution), to cause widespread outbreaks of disease and mass fatalities, and to cause long-term disruption of the central government's ability to function. Such a scenario could significantly challenge all the existing knowledge in the field of community coping and resilience. To plan for such eventualities the bulk of the responsibility should be transferred to the general population. In the framework of this kind of preparedness sources of local assistance and knowledge should be identified and organized in advance, basic survival skills training for the general population in complex circumstances should be provided, and the use of readily available, home-based measures for preliminary defense should be encouraged. To this end a program should be developed in the spirit of Churchill, who promised the British people during World War II that their response to the enemy would be comprised of "blood, sweat and tears". The population should be prepared for scenarios in which the citizen is master of his/her own fate.

Programs for community preparedness in the event of disaster must take into account the conflict over who is responsible for which tasks, as numerous volunteers and helpers will face this problem. In the event of an apocalyptic disaster, such a situation could completely disrupt both the preparedness plans for emergencies and the ability to cope (Lahad & Ben Neshet, 2000).

The Board on Natural Disasters (1999) pointed out that reliance on response and recovery strategies—instead of mitigation—means incurring the continuously escalating costs that go along with the escalating damage associated with natural disasters. Response and recovery are necessary for humanitarian, economic, and political purposes; however, they must be accompanied by effective mitigation programs aimed at reducing losses.

The maintenance of voluntary emergency systems, over time, in the absence of an actual state of emergency is a process that leads to attrition of enthusiasm and preparedness and is likely to minimize the effectiveness of the system in the event of an actual emergency. The challenge facing us, in an age of global terrorism, is to create speedy models for the strengthening of community resilience and the upgrading of the ability to cope after an attack.

Because we wish to demonstrate that a resilience model that would suit the manmade disaster situation, would also be of great benefit in many natural disasters, we propose an integrated model for the development of systemic, self-initiating community resilience which we call the Integrative Resiliency Model (Ben Neshet and Lahad, 1997). This is a synthesis of the Diamond Model (Ben Neshet 1990) and the Integrative Resiliency Model (BASIC PH) (Lahad, 1993). The Diamond Model identifies four primary resources for the building of operational resilience: internal locus of control, self-efficacy, commitment and cohesion.

The unique contribution of the Diamond Model is in its insight that, within an organization (which is comprised of people), there exists on the one hand a complex dynamic of processes that contribute to operational resilience, and on the other hand exposure to pressure and threat from the surrounding environment that weakens resilience.

Thus to develop organizational, operational resilience (community resilience) requires that assistance be provided to the organization coping with the difficulties and challenges that emerge, that are caused either by external factors or are the result of processes within the organization itself. The creation of operational resilience is a continuous and dynamic process that is constantly updating itself in relation to the status in the community of each of the four preliminary categories (internal locus of control, self-efficacy, commitment and cohesion). The combination with the integrative BASIC Ph Model (Lahad, 1992) facilitates early identification, also referred to as prevention, or immediate identification, also referred to as mitigation, via the individual coping profile of individuals in the community. This helps to direct the intervention by focusing on the identified coping abilities.

The building of a coping resource profile for the individuals in an affected community can help to identify various resources even if they are of differing strengths. The person providing the intervention can choose different channels for interventions based on an assessment of the available resources and thus can encourage a renewed galvanizing of coping abilities. The integrated model facilitates identification of the appropriate "codes" for the community and the individuals within it. The synthesis between the two models enables the matching of interventions to each community unit (from the individual to the organization) by adopting the approaches and tactics that increase its chances of successfully coping with difficult situations.

A schematic description of the model is provided in Figure 12.1 A necessary condition for utilizing the integrated model is the creation of the awareness of threat (a partial neutralizing of the denial) with which the community must contend. The advantage of the Diamond Model is apparent in the fact that each of the four preliminary categories of the sources of operational resilience is expressed in an operational form that facilitates identification of overt behavior and the expressed values of the individual or organization. On the one hand, the individual providing the intervention is offered criteria for identifying the principal codes for the sources of the coping resources that can be applied and brought into action (BASIC PH) (See Figure 12.1). We believe that the Diamond Model can be applied quickly by an intervention team assisting a population under attack both during an event and subsequent to it. The proposed model also facilitates application in the process of building future coping abilities.

Figure 12.1: The Integrated Model of Resiliency Resources: Synthesis of the BASIC PH and Diamond Model

Insert Figure 12.1 about here.

This model has been used in different circumstances, mainly in the wake of disasters and crises such as: terrorist bus bombings in Jerusalem (No. 18 bus) and in Tel Aviv (No. 5 bus), terrorist explosive devices in Tel Aviv (Café Apropos) and in Jerusalem, a helicopter disaster in Sha'ar Yeshuv, the settlements on the front line in the north after Operation "Accountability" (1993) and "Grapes of Wrath" (1996). The model was also applied in situations of tension resulting from threat and uncertainty such as: in the settlements in the Golan Heights following the declarations that the Heights would be returned to the Syrians, in the recent evacuation of Israeli settlements from Gaza strip and in post natural disasters outside Israel such as the earthquake in Turkey 1999, and the tsunami in Sri Lanka in 2005.

The main result of the application of the intervention model was apparent in the ability of people and organizations to function, despite the pressures and hardships through effective multi-dimensional coping with the crisis, to the extent of creating a new situation that allowed

the participants to achieve their objectives despite the losses and difficult experiences that they encountered. As stated, there is a desperate need for evaluative research to expose the proposed intervention concept to objective scrutiny.

CONCLUSIONS AND RECOMMENDATIONS

To summarize, we would like to focus on a number of recommendations for operational principles for community teams during the stages of preparedness and intervention for disasters and emergencies. Our experience shows that the following approaches are important:

- To instill a social-community approach in all models of intervention following disaster
- To assist in the creation of a professional social-community team in the framework of a decision-making headquarters
- To assist in the defining and mapping of target populations, to identify their various needs, to develop responses and approaches for effective coping with the new situation and its implications
- To assist in the identification of coping resources and to apply them, while creating opportunities for recovery, rehabilitation and renewal on the levels of the individual, the family and the group
- To strengthen the administrations, the reciprocal relationships and the cooperation between the social-community systems and the defense and economic systems
- To facilitate the smooth functioning of, and circumstances-permitting, to assist in the preservation of the family, social community and organizational frameworks throughout all stages of the rehabilitation process
- To ensure good communication with local communities, as this is crucial from the perspectives of both ethics and efficiency. One lesson from the response to the 1998 Afghanistan earthquakes is that agencies could set up short-wave radio to broadcast relief objectives to survivors, where local capacity to do this exists (International Federation of Red Cross and Red Crescent Societies (IFRC), 2000).
- To recruit the mass media to help to strengthen the coping efforts and to assist them in temporarily refraining from their tendency to negative reporting and criticism, to repressing the self-efficacy and to the search for "guilty parties".

To facilitate the above recommendations, the groundwork must be laid to develop:

- A regional/district behavioral system for intervention, support and rehabilitation that will be able to function even in the absence of, or in the event of, a delay in response from the central government.
- Post-disaster shelter should be linked to livelihood promotion, concerning factors such as proximity to services and the workplace, as well as use of housing as a workplace. Shelter and livelihoods are often closely linked in rural settings in South Asia. For example, women may use their homesteads as a place for growing vegetables and raising livestock, for either home consumption or sale.

- Affected people may prefer to stay close to their homes, living in makeshift accommodation or moving in with other family members or neighbors, in order to protect surviving household members, possessions, and to ensure continued control of land. Relocation should be considered as an option only where communities are seeking this, or where it is not safe for communities to remain.
- A local system of volunteers.
- A guide for the creation of immediate-response networks of community activists with a defined purpose.
- Flexibility in providing solutions to problems.
- Doctrine on the subject of the role of the local and national mass media during and following a disaster.
- Indices according to which community and national resilience may be measured.
- Protocols for assessing the efficacy of the interventions.
- A standard intervention kit based on an evaluation of which basic services are required to ensure the survival of the citizens
- Focused programs to further the concept of individual capability and community resilience for the family and community.
- A system that supports and relates to a positive solution to the conflict among helpers resulting from tensions about who is responsible for which services during an emergency.

All of these preparations and responses can be applied to any disaster situation, including natural disasters and hazards. It remains for world and country agencies to provide funds to implement such models and strategies and to evaluate their efficacy. Research needs, however, tend not to adequately measure the need for urgent and just responses to all, rather they tend to compare areas in which the models were implemented and those in which they were not. There is no doubt that funding needs to be set aside on a global level to test models that might in the immediate future attend to a community's urgent needs following natural and manmade disasters, and that in the longer term become an economic asset, as they set in place ongoing and sustainable systems for managing disasters.

REFERENCES

- Ayalon, O., & Lahad, M. (2000). *Life on the Edge*. Haifa: Nord Publication. (Hebrew)
- Ayalon O. Lahad, M., Cohen, A. Niv, S. & Shacham, Y. (2003). The HANDS project: Helpers Assisting Natural Disaster Survivors. In O. Ayalon, M. Lahad, Cohen, A. Community Stress Prevention, Vol. 5, Kiryat Shmona: CSPC. (pp. 127-135).
- Ayalon, O. (2005). *Preparing a small team to help many victims : the cascade model of psycho-social intervention in disaster areas*. In A. Zomer & A. Bleich (Eds.), *Early interventions after disaster and terrorism: The Israeli experience*. Tel Aviv: Ramot. (Hebrew)

- Ben Neshet, U. (1985). The Diamond resiliency model for systems and organization IDF. (Hebrew)
- Ben Neshet, U. (1997). *The diamond resiliency model for systems and organization*. Mashaby Enosh Dec 1997 (Hebrew)
- Ben Neshet, U. (1990). Human resource manager - Preparations for emergency. *Menahalim*, September 32, 24-26. (Hebrew)
- Ben Neshet, U., & Ben Neshet, A. (2001). Pigeons in the square: Working with the media in emergencies. *Da-Melach*, 42, 19-21(Hebrew)
- Ben Neshet, U., Lahad, M., & Shacham, Y. (2002). *Report on survey of community Resiliency*. Kiryat Shmona: CSPC. (Hebrew)
- Ben Neshet, U. & Lahad, M. (2003). The integrative model of resiliency and coping. Tel Aviv: Human resources December 2003. (Hebrew)
- Ben Neshet, U., Gidron, D., & Shanana, S. (2003). *Handling Public Behavior - Method of Operation*. IDF: PBO unit. (Hebrew)
- Board of Natural Disasters (1999) as published in http://fermat.nap.edu/openbook.php?record_id=6363&page=58.
- Brander, M. (2001). *Survey of the Community Intervention Teams*. Ma'ale Edomim: Ministry of Interior. (Hebrew)
- Cohen, A., Gilad, M. (1997). Preparing Non-Professional Volunteers for Crisis and Emergency In M. Lahad & A. Cohen, Community stress prevention, volumes 1 and 2 (pp. 154-159). Kiryat Shmona, Israel: Community Stress Prevention Centre.
- Community Resiliency Center. (2003). Ministry of Welfare , the social and individual services department, Jerusalem.(Hebrew)
- International Federation of Red Cross and Red Crescent Societies (IFRC). (2000). *World Disasters Report 1999*. Geneva: IFRC.
- World Disaster Report: Focus on Community Resilience*. Geneva: IFRC.
- Lahad, M. (1993). Finding coping resources by means of six-part storymaking, the BASIC Ph model. In S. Levinson (Ed.), *Psychology in the school and the community: Models of intervention during times of calm and emergency* (pp. 55-70). Tel Aviv: Hadar. (Hebrew)
- Lahad , M. (1997a). Community Media in Emergencies, *Da Melach* (37) 9-11. (Hebrew)
- Lahad , M. (1997b). *Manual for Mental health Officers*, IDF. Israel. (Hebrew)
- Lahad, M. (1999) *Manual for Mental Health Officers* , Tel Hashomer, IDF. Israel. (Hebrew)
- Lahad , M., & Ben Neshet, U. (2000). How to assist managers in Emergencies ? Jerusalem: Ministry of Health, Aruchim, (5) December. (Hebrew)
- Lahad, M. (1997c). BASIC PH: The Story of Coping Resources, In M. Lahad & A. Cohen (Eds.), *Community Stress Prevention, Volumes 1 and 2* (pp. 117-145). Kiryat Shmona, Israel: Community Stress Prevention Centre.
- Lahad, M. & Horwitz, S. (2005). Report on the Tri National Project in Sri Lanka following the tsunami 2004. submitted to ITC , JDC, and UJA Fed NY. (unpublished)
- Ross, G. (2003). *Beyond the Trauma Vortex, The Media's Role in Healing Fear, Terror & Violence*. Berkley, California: North Atlantic Books.
- Sela, P. (1996). An integrative approach to organisational intervention in a

community in crisis. In M. Lahad & A. Cohen (Eds.), *Community stress prevention* (Vol. 2, pp. 199-219). Kiryat Shmona, Israel: Community Stress Prevention Centre.

Shacham , Y., Lahad , M., Sela , M., & Shacham, M. (2003). Community preparedness for prolonged exposure to emergencies, and for public evacuation. In A. Klingman, A. Raviv, & B. Stien (Eds.), *Children under stress and emergencies: Psychological Intervention* (pp. 143-169). Jerusalem: Ministry of Education, (Hebrew)

*Ya'acob, Y. (1997). *Manual for the Community Response Teams*. Benjamin regional council. Welfare Department. (Hebrew)

The combined model of resiliency resources "The Diamond Model" (Ben Neshet Lahad ©)

