

PSYCHOSOCIAL SUPPORT RESPONSES IN RADIOLOGICAL AND NUCLEAR DISASTERS

Psychosocial impact

At the 10th anniversary of the Chernobyl accident, experts concluded that “social and psychological effects were among the most prominent and lasting consequences” of the nuclear reactor accident. In the event of a nuclear disaster high levels of anxiety and stress and the fear of the potential health impacts are likely to be disproportionate to the biological significance of radioactive contamination. These adverse psychosocial effects may constitute a greater public health impact than syndromes resulting from exposure.

Many of the psychological and social effects of a nuclear disaster are similar to those in other emergency situations. However, fear is even more likely to result when a nuclear threat is involved for several reasons:

- The nuclear radiation is invisible; therefore people cannot rely on their own senses to determine physical exposure and the effects of contamination may also persist for a long time after the event.
- Most health effects take at least 5 years to appear and fears with regard to cancer and the development of children may persist. Therefore, psychosocial effects are likely to persist for some time after the acute crisis.
- The nuclear materials may contaminate the environment in various ways rendering it unsafe or unusable and this may necessitate evacuation. The perceptions of nuclear threat may also result in self-evacuation from areas of perceived danger in large numbers. Evacuation is an experience that is stressful and increases the risk of separation from social supports and breakdown of community support systems; this may have economical costs and psychosocial fallout.
- Nuclear threats are rarely encountered. Uncertainty or contradictory public information with regard to health risks and the appropriate actions to take to mitigate risks may increase fear.
- Signs of autonomic arousal are common among frightened persons, but may be misattributed as evidence of contamination and be expressed as medically unexplained symptoms. Frightened but physically healthy individuals may overwhelm the health care services constituting an epidemic of medically unexplained illness. Although, symptoms of radioactive contamination are quite unlike the signs of autonomic arousal these may co-exist and will necessitate triage.
- Persons wearing protective clothing, masks and respirators may experience distress due to the constraints imposed by this equipment on the senses, breathing, movement and communication.
- If the threat is perceived as a terrorist attack this is associated with a greater experience of threat to health and wellbeing.

However, despite high public fear and uncertainty historical evidence suggests that public panic is rare and is limited to situations when there are inadequate exits in confined spaces or there is a perception of limited access to essential, life-saving health services. The vast majority of people can be expected to cope quite well.

Responses & Interventions

One important part of emergency planning for response and recovery to nuclear events is the acknowledgement that the public's reaction to a nuclear event may be rather rapid and linked to the immediate affective state evoked by the threat. Even those too far away to be affected may believe that they and their families are at risk. Following responses are recommended:

Public Information Campaign

Public information campaigns must be directed at the unaffected portions of the community as well as the victims. This can diminish anxiety, promote effective response and decision-making and may directly reduce the overall psychosocial impact of the primary event as well as minimizing risk taking behaviors.

- A reliable flow of credible information should be made available to the public. There must be no conflicting information. The representatives delivering information to the media must have high credibility with the public.
- Communication should follow the principles of effective risk communication, e.g. providing timely, uncomplicated and empathic information.
- Communication should include information about the nature of the risk and the exact recommended prevention methods of reducing risk, the availability of medical evaluation and treatment and other assistance and how and where to obtain them, and the information on the relief efforts.
- All public information must be delivered in a culturally sensitive way, including appropriate language, reading level, and respect for local traditions. Appropriate public information can be a critical link in community recovery.
- Epidemics of medically unexplained illness may occur as a result of the fears of contamination and is best managed using a coordinated public health effort involving different sectors. Results of tests to determine contamination need to be communicated carefully, good news should be emphasized. Symptoms should be validated as genuine and it is important to convey that medically unexplained symptoms are common in disaster settings and that most people tend to improve rapidly.

Psychosocial interventions

Community-based psychosocial systems integrated with general health services may be more effective in addressing psychosocial issues during and after emergencies than responses centered on psychiatric institutions. Setting up vertical mental health services for subpopulations based on the level of exposure is discouraged; rather the integrated, community-based systems should be tailored to address the needs of different subpopulations.

Emergency phase

- In the acute emergency phase non-professional caregivers should be trained to provide psychological first aid (PFA). PFA should be made available in the community at general health care facilities and other locations where people seek help. Providing supervision and the possibilities of referral is important when providing PFA.
- Create natural opportunities for individuals to share their concerns and support each other may be helpful, but single-session psychological debriefing is not recommended.

- Field officers should be briefed about issues of fear, grief, disorientation and active participation and measures to support the psychosocial wellbeing of health and relief workers should also be implemented.
- Telephone support and systems for communication and re-establishing links with family and social supports, are important particularly in evacuation situations.
- Spaces should be provided for religious, recreational and cultural activities and normal cultural and religious events should be re-established.
- Recreational and school activities for children and activities for vulnerable groups should be started.
- Adults and adolescents should be involved in concrete, purposeful, common interest activities.

Post-emergency phase

- Relevant outreach activities and psychosocial interventions should be organized in order to facilitate help seeking and promoting positive ways of coping and expectations of natural recovery. These may be combined with activities to promote economic development in cases of emergency induced poverty.
- The interventions should include the dissemination of clear, simple, consistent and easily understandable information by trained community workers or volunteers.
- Community workers should be trained and supervised in conducting psychosocial support interventions and humanitarian workers and community members should be trained in the basics of psychosocial support knowledge and skills in order to raise awareness and promote help seeking and referral.
- Building credibility and a trustful relationship with the community is paramount. Recruiting local staff and volunteers and including community members in planning and implementation is can make this easier.
- It is also important to build functional referral systems. The creation of community-based, self-help support groups should be facilitated with a focus on problem sharing and solving, coping and emotional support. Collaboration with traditional healers may also be relevant.

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