

The psychosocial dimension of health and social service interventions in emergency situations

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THE OCCURRENCE OF MAJOR DISASTERS ALL OVER the world in recent decades has fueled interest in emergency psychosocial interventions.^{1,2} The psychological consequences of catastrophes are generally underestimated^{3,4} even though they are often much greater than the physical effects.⁵ There is therefore unequal, and sometimes insufficient, planning when it comes to the psychosocial component of comprehensive emergency response plans.³ To fill this gap, several government and health authorities, such as the US National Institute of Mental Health, the US Centers for Disease Control and Prevention and the Organisation de sécurité civile du Québec (Civil Protection Organization of Quebec) have started to include a psychosocial component in their overall emergency response plans.^{6,7}

The psychological impact of disasters

Disasters are defined as situations whose impact can overwhelm the adaptive capacity of affected populations and groups, to a varying extent and for more or less extended periods of time, depending on the circumstances.⁸ There are two major types of disasters:⁴ natural disasters (e.g., floods) and disasters resulting from human action, whether intentionally (e.g., shootings) or unintentionally (e.g., toxic spills).

Disasters can have a significant psychosocial impact because they bring substantial loss for the victims: loss of loved ones, of bodily integrity, of material goods, of places they have made their own, of a sense of safety and security, *etc.*⁸ Natural disasters usually have a beginning and an end, which helps make psychological recovery easier. Disasters linked to human activity, particularly those of an intentional nature, are more disturbing⁴ because they generate feelings of psychological threat and uncertainty about the associated risks. In such conditions, it is not unusual to see more long-term reactions of stress and demoralization set in.⁹ Although genocide is not included among the disasters linked to human activity covered in this paper, references on this issue have been included for interested readers.^{10,11}

Disasters also create different categories of victims.⁸ First, there are the primary victims: those who are directly and personally affected. Then there are the witnesses of disasters and their traumatic effects, including emergency response service providers. Finally, there are all those exposed indirectly to the victims themselves, or to the scene and the consequences of the disaster through the media (e.g., friends and family, the general public).

A strong connection has been found between the level of media exposure given to a disaster and the degree of anxiety experienced by those who have not been directly exposed and for whom the disaster does not pose an immediate threat.^{4,12-15} Visual images are one of the most powerful influences on the perceptions and emotional reactions of the population. Their impact is even more harmful among certain subgroups, such as children;^{14,15} therefore, excessive or repeated exposure of more vulnerable persons to media reports is not recommended.¹³

The *Diagnostic and Statistical Manual of Mental Disorders* (DSM IV)¹⁶ now recognizes that indirect exposure to traumatic events can trigger post-traumatic stress disorder (PTSD), defined as a prolonged stress reaction accompanied by dysfunction and a deterioration of adaptive functions.

A study conducted two years after the Oklahoma City terrorist attack revealed the presence of typical PTSD symptoms in the vast majority (87%) of a group of sixth-grade children from a remote city who had

been exposed to the disaster in an indirect manner (such as through a friend who knew a person who had been killed or injured, or through the media).¹⁵ Moreover, 19% of the study group reported having difficulty functioning at school and at home. In the case of media exposure, reported symptoms were proportional to the degree of exposure.

A rigorous epidemiological study conducted two months after the events of 11 Sept. 2001 in the United States confirmed the link between direct and indirect exposure (through television) to the events and the prevalence of clinical symptoms of post-traumatic stress disorder and psychological distress.¹² In the case of direct exposure, geographic proximity to the site of the disaster was significantly associated with the prevalence of PTSD symptoms in the New York region (11%) compared with the rest of the country (4%). With regard to indirect exposure, symptoms were significantly associated with the number of hours spent watching television, and with the graphic content of the scenes watched. A significant increase in anxiety was also found in adults, particularly women, who were exposed to television reports about terrorist activities.¹⁴

Most stress reactions to disasters are moderate and transitory. Some people experience more intense reactions that do not, in general, become chronic problems. However, approximately 9% of people exposed to a disaster, whether directly or indirectly, eventually suffer from PTSD.^{8,17} Some groups, such as children, elderly people and—given the intensity and duration of their exposure to direct victims—emergency response service providers are naturally more vulnerable. It is important to support emergency service providers through training and clinical supervision, among other measures.^{7,9,18}

Emergency psychosocial interventions

Psychosocial interventions can be provided at different times in the context of a comprehensive emergency response plan. In Quebec, the health and social services network has been very well equipped since the early 1990s to mobilize service providers and concerned partners as part of the process of organizing civil protection services (see Textbox 1).

The **preparedness phase** corresponds to the provisions made to prepare a proper response to the various disasters that might occur. The less prepared organizations and service providers are to face a disaster, the more severe its impact will be.³ Problems of leadership, communication and cooperation that commonly arise in emergency situations are usually related to insufficient planning.^{3,24,25} It is therefore important to develop emergency response procedure plans or protocols that identify the resources required and specify the responsibilities of each resource in the

event of an emergency. Prior training of the service providers called on to perform psychosocial interventions in emergency situations also has a direct influence on their ability to fulfill their role effectively.²⁴

The preparatory phase makes it possible, among other things, to:

- develop cooperation agreements with partners who are likely to be closely linked to emergency psychosocial interventions (e.g., professional associations, community organizations, crisis centres, religious communities, etc.)
- fine-tune communication and information management mechanisms for the media and general public¹³
- develop tools to identify vulnerable subgroups, survey the situation and conduct evaluations, in order to better capture the needs of the population and the effectiveness of the measures that are put in place. These tools can pinpoint aspects such as: the needs of vulnerable persons; the nature of citizens' fears; precautions already taken and desired preparation; factors influencing a feeling of safety and measures likely to increase this feeling; expectations with regard to resources and services, etc.²⁶ Given their monitoring, evaluation and research functions, public health bodies can play a useful role in this respect.

The **response phase** corresponds to the period immediately after the disaster. The goal of psychosocial interventions during this phase is to smooth the way for psychological assimilation of the events and to minimize the negative impact of those events to help individuals and communities return to normal psychological and social functioning as soon as possible. It is a question of lessening feelings of fear, uncertainty and vulnerability among the individuals and various subgroups of the population affected by the disaster, and of restoring their feelings of confidence, competence, self-sufficiency and control. It is also necessary to preserve social cohesion and maintain natural social support networks, for example by encouraging mutual help groups within the affected communities.

It is important to put into practice, as quickly as possible, various agreement protocols developed during the preparedness phase. The fact of working in close cooperation with partners not only makes it possible to enhance the effectiveness of the actions undertaken, but also helps reassure the population by showing that there is an organized model for cooperation and action to overcome the chaos.²⁷ A proactive attitude and rapid response on the part of the authorities concerned helps restore a feeling of safety.

During the response phase, information needs usually supersede psychological assistance needs.^{13,28} Insufficient, inaccurate or contradictory information

Textbox 1: Quebec model for the organization of health and social services in the context of emergency civil protection measures

In Quebec, a psychosocial component has been incorporated into the organization of emergency response services since the early 1990s. After the shootings at the École Polytechnique in 1989, the Ministère de la Santé et des Services sociaux (MSSS) of Quebec developed a model for the organization of health and social services in the context of civil protection emergency measures. Many elements of that model are still in effect today, including a health care network personnel training program and intervention kit, which is updated regularly.^{18–20} After the Saguenay Valley floods of 1996 and the ice storm of 1998, the *Civil Protection Act*, passed in 2001, entrusted the Ministère de la Sécurité publique du Québec with an oversight role, encompassing the mandate to develop and maintain the National Civil Protection Plan and the power to declare a national state of emergency.⁷

Main elements of the Quebec model for emergency civil protection measures are as follows:

- **Plan national de sécurité civile** (PNSC; National Civil Protection Plan). This plan makes it possible to organize and coordinate the actions of the 29 government departments and organizations involved. It includes 15 or so missions aimed at meeting the needs of the population in a major emergency.
- **Comité de sécurité civile du Québec** (CSCQ; Quebec Civil Protection Committee). This body, which brings together the heads of the 12 main departments and organizations concerned as well as the government coordinator designated by the Minister of Public Security, plans and supervises the government's actions with regard to civil protection.
- **Organisation de sécurité civile du Québec** (OSCQ; Quebec Civil Protection Organization). Directed by the government coordinator, this body plans Quebec-wide civil protection measures and coordinates the operations carried out according to the PNSC.
- **Health and social service organization model for civil protection.** Within the OSCQ, the ministerial coordinator for civil protection of the MSSS provides information and cooperation with regard to the PNSC's health mission. It fulfills this responsibility through five types of activities:
 1. maintaining health and social service network activities: continuity of services
 2. physical health: reducing mortality and morbidity, including receiving a massive influx of disaster victims
 3. public health: setting up population protection measures
 4. psychosocial aspects: interventions to minimize psychosocial effects and facilitate the return to everyday life
 5. communication: managing information for the population, the media, decision-makers, network staff and partners.

At the central level, the MSSS establishes broad guidelines and sets budget parameters. At the regional level, the Agences de santé et de services sociaux (Health and Social Service Agencies) organize and coordinate services and allocate the budget to institutions. At the local service network level, the Centres de santé et de services sociaux (CSSS; Health and Social Service Centres) provide all five types of services in connection with the other public and private institutions on their territory (hospitals, rehabilitation centres, long-term care centres, etc.), medical clinics and their various partners (municipalities, schools, etc.). Services provided at the local level must also fit in with the regional mobilization plan stipulated in the *Public Health Act*.^{7,18,21–23}

causes psychological distress.⁴ Conversely, a clear communication strategy that uses official spokespersons and credible experts keeps fearful and anxious reactions generated by rumours and misinformation from escalating. Factual, rigorous treatment of information is psychologically reassuring: it dissipates uncertainty and worry, and conveys, either explicitly or implicitly, the message that the actions that have been set up will be effective in the short or medium term.²⁹

This is also the time at which it is appropriate to use and adjust the educational material developed for this purpose for the various groups, including service providers, the media and the general public.²¹ In Quebec, the *Trousse d'outils pour l'intervention psychosociale dans le cadre des mesures d'urgence* (Emergency Psychosocial Intervention Tool Kit) developed for service providers contains material that addresses the various aspects of emergency psychosocial intervention. It covers typical

psychological reactions according to age group, phases of the adaptation process and influencing factors, recommended strategies and approaches, etc.²⁰

The **recovery phase** is the more or less extended recovery period following the disaster. It is aimed at facilitating the psychological recovery process in the medium and long term, and at restoring a sense of community. At that point, disaster victims often realize what they have lost to an even greater extent. Their psychological needs are therefore sometimes felt more intensely than during preceding phases. Symbolic activities (e.g., commemorative ceremonies) take on great importance. At the individual level, they help alleviate sadness. At the collective level, they foster the return of social cohesion.

Paradoxically, this phase is often the period in which the media become progressively less interested in the situation in favour of more recent events and “hotter” news. Emergency services, broadly deployed during the response phase, are withdrawn as service

providers return to their regular occupations. Volunteer efforts also decrease gradually at a time when they could be more useful than ever. A widespread withdrawal of attention from the media and service providers therefore takes place precisely at a time when the people, groups and communities that experienced the disaster are really starting to mourn.

Among the most vulnerable persons, this is generally the time at which the most severe psychological problems, such as PTSD, appear. These problems can be detected either by the persistence of symptoms that were already present during the response phase or in the appearance of new “delayed-reaction” symptoms. This is why it is crucial to ensure that sufficient resources are maintained to make it possible to screen, guide and support the most severely affected groups. Taking into account the role of general practitioners as an entry point into the care system, it is particularly important to raise their awareness of this phenomenon and of the close connection between physical and psychological symptoms, be they specific (PTSD) or non-specific (distress).

Finally, the recovery phase is the ideal period in which to conduct studies to evaluate the effectiveness and outcomes of interventions implemented during the previous phases.³ As mentioned earlier, public health bodies can help conduct such studies and develop further knowledge with regard to the effects of disasters on the health and well-being of the population (including the level of psychological distress) and the appropriateness of the interventions provided.

Conclusion and perspectives

The growing risk of disasters and other emergency situations has led health services to better organize their responses by setting up an emergency response plan in all institutions, as is currently the case in Quebec. The psychosocial aspect is now specifically considered³⁰ and involves the development of information and intervention tools as well as various support activities in emergency situations. In Quebec, the health care network is particularly active with regard to psychosocial interventions, as demonstrated by the Quebec Plan to Fight the Flu Pandemic.³¹

Based on the above analysis and the documents consulted, it is possible to conclude with a few perspectives on the development of psychosocial interventions in emergency situations, notably:

- the importance of paying more attention to clinical supervision of service providers, taking into account their high degree of exposure to disaster victims and, consequently, their increased vulnerability to stress;
- the relevance of creating, during the preparedness phase, a bank of resource persons able to provide

either clinical supervision or advisory assistance with regard to the coverage plan or the appropriateness of psychosocial services relative to the effects of the disaster, or special expertise in areas that complement emergency psychosocial intervention (e.g., terrorism, cultural mediation, etc.);

- the usefulness of continuing to evaluate the effects and outcomes of the interventions provided, with the aim of improving current practices.

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