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REVIEW ARTICLE

Promoting Mental Health and Resilience after a Disaster

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Until recently, mental health programs during and after disasters were considered to be controversial. A disaster exposes many people to extreme stresses and injury and illness. Especially in resource-poor countries, a disaster also brings a range of problems that erode protections, increase social injustice and inequality and entail human rights violations. There is a growing international consensus on the need for a range of mental health and social interventions integrated with existing systems. The mental health and psychosocial response programs increasingly integrated into humanitarian assistance programs can be seen as an opportunity to model the introduction of mental health centrally and explicitly in the public heath framework of a country. Mental health is a state of wellbeing in which a person can use their own abilities and cope with the normal stresses of life. It is promoted by effective public health and social interventions. Mental health and physical health and behavior are closely interconnected. These connections are important after a disaster. Resilience refers to a person's relative resistance to, or the overcoming of, stress or adversity. Mental health and resilience depend on interactions between personal and wider social factors, such as safety and access to education and work. Effective interventions to promote mental health and resilience after a disaster focus on self-efficacy and community participation. Interventions occur at several levels, and alongside help provided to those with mental illnesses. They include social policies such as rebuilding housing and opening schools. They also include activities closer to the person, such as livelihood support to women and girls. A challenge now is to evaluate and refine programs and good practice after a disaster: monitoring the effects on mental health of activities in nonhealth sectors; and monitoring the effects on broader health and function of activities designed primarily to promote mental health.

1. Introduction

Mental health programs during and after disasters were considered to be controversial until recently, especially in resource-poor countries where most disasters occur. The devastation caused by the 2005 Asian tsunami and the responses to this disaster marked a watershed in understanding mental health responses to mass catastrophe. The World Health Organization (WHO) and a range of international organizations now advocate clearly the use of social interventions and the integration of trauma-focused care into general mental healthcare, which should be available in general healthcare settings.[1] There is a wide inter-agency agreement and growing consensus on the approaches recommended for mental health and psychosocial support in emergency settings.[2,3] Such activities are increasingly integrated into humanitarian assistance programs. There are recent clear expositions of the field of 'Disaster mental health' and the consequences of a disaster.[4–6] A disaster or other humanitarian emergency will cause substantial psychological and social suffering to the affected population. There is no doubt that the prevalence of mental health and psychosocial problems is high.[7,8] As well as increased rates of mental disorders and mental health problems, "evidence exists of the effect of deteriorated environmental conditions on mental health and wellbeing in humanitarian settings, including undermined social support networks, opportunities for generating incomes, and respect for human rights."[7]

Points of disagreement remain about research and practice, including the place of separate trauma services, the role of social programs, and appropriate timing and focus of interventions.[7] The international consensus is based on wide experience and understanding of needs, but there is a weak empirical base to support specific responses. Recommendations now exist on how to rectify that.[8] Broader opportunities also exist to advance mental health in affected regions. A disaster or other humanitarian emergency has been seen as an opportunity to introduce community mental healthcare programs for underserved populations in resource-poor countries.[9,10] It can be seen, in addition, as an opportunity to

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introduce mental health centrally and explicitly into the public health and social service framework of an affected community. Until now this is rare in any country, in part because the relationship between mental health and mental illness, and the scope of public mental health in any context, remain unclear in public and professional minds.

By definition, "a disaster is the result of exposure to a hazard that threatens personal safety, disrupts community and family structures, and results in personal and societal loss creating demands that exceed existing resources."[11] Disaster can overwhelm local resources and alters the community's normal activities, strains and disrupts social support. The effects depend on exposure to traumatic stressors, losses, and continuing adversities associated with the disaster.[12–15] Disaster-affected communities often have great need of external assistance. The changes for communities and individuals can also create a vulnerability to harm from outside influences.[16]

Especially in resource-poor countries the range of problems brought by a disaster entail human rights violations: displacement, family and social disruption, erosion of traditional value systems, a culture of violence, weak governance, absence of accountability and poor access to health services. A disaster erodes social protections and increases pre-existing social injustice and inequality. It will typically have a disproportionate effect on poor people.[2] The consequences of these problems need to be considered alongside the needs of ill and injured people. This is reflected in the growing consensus on the need for a range of social and mental health interventions integrated with existing systems.[1,5] Certainly the option to ignore mental health in the face of uncertainty is no longer legitimate. Furthermore, "As (social) interventions tend to deal with important factors influencing mental health, health and mental health professionals should work in close partnership with colleagues from other disciplines (e.g., communication, education, community development and disaster coordination) to ensure that relevant social interventions are fully implemented."[1]

This article will next consider the relationship between mental health and mental illnesses, and modern approaches to improving mental health for populations and people. It will then reflect on the growing understanding of the relevance of mental health to human rights and economic and social development in countries. In this context it will return to consider the question of promoting mental health and resilience after disasters, and the lessons for public mental health programs and public policy in all countries.

2. Promoting mental health and resilience in any setting

2.1. Defining mental health

Mental health is a set of positive attributes. It is defined by the WHO as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to his or her community.[17] Three features of mental health are highly relevant: it is intrinsic to health; it is more than the absence of mental illness; and it is intimately connected with physical health and behavior. These ideas are implicit in the well-known definition of health used by the WHO: a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Although the attributes defining mental health are universal, their expression differs culturally and in different contexts. Sensitivity to the factors valued by each culture and in various political, economic, and social settings, increases the relevance and success of interventions.[18] Those developing interventions in any setting need to understand, how discrimination affects the lives of women or indigenous communities, or people living with a disability.

2.2. Influences on mental health

An individual's state of health or experience of illness is determined by personal experiences, social circumstances, culture and political environment in addition to inherited or biological factors.[19] Poverty, social disadvantage, human rights abuses and social exclusion have adverse effects on the health and mental health of people in all parts of the world.[20–23] The factors that contribute to mental health and mental health problems can be grouped into three elements: the individual, their society, and the cultural and political environment. Environmental factors include: adequate housing; domestic and public safety; access to good education for all; fair working conditions and legal recognition of rights to freedom from discrimination. Social factors include: the benefits of strong early emotional attachments; access to secure relationships characterized by affection and trust; abilities to communicate, negotiate and participate and attainment of autonomy. Individual determinants include capacities to: regulate emotions and thoughts; learn from experience; manage conflict; tolerate life's unpredictability.[19]

2.3. The importance of mental health

The connections between mental health and other aspects of health and productivity give it importance beyond its intrinsic value. Mental health is intimately connected with physical health and behavior,[23] as well as educational performance, employment and crime reduction.[24–26] It contributes to human, social and economic development, and helping people and communities reach their potential.[27] Health programs worldwide give relatively little attention to mental health and mental illness.[28] This results from failure to recognize the value of mental health to the individual and community[29] as well as failure to recognize the humanity and dignity of those living with mental illness.[30–32]

2.4. Promoting mental health

Like health promotion, mental health promotion involves actions that support people to adopt and maintain healthy ways of life and create living conditions and environments that allow or foster health. It refers to the mental health of everybody in the community, including those with no experience of mental illness as well as those who live with illness and disability. Much of the work is done outside the health sector. Health practitioners are important as advocates and advisers to introducing the policies and programs.[24]

Actions leading to the promotion of health, the prevention of illness and disability, and the treatment and rehabilitation of those affected can all contribute to improving mental health in a population, whether or not affected by a disaster. These are different from one another, even though the actions and outcomes overlap. They are all required, are complementary, and no one is a substitute for the other.[29] Health promotion is concerned with the determinants of health and prevention focuses on the causes of disease. The actions that promote mental health will often have as an important outcome the prevention of mental disorders.[33] Mental health promotion refers to activities that go beyond (though may contribute to) preventing and treating illness.

The Ottawa Charter for Health Promotion recommends strategies that can be applied usefully to promoting mental health.[34] It considers the individual, social and environmental factors that influence health. It emphasizes the control of health by people in their everyday settings as well as healthy policy and supportive

environments. The Charter's five strategies are: building healthy public policies, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services. Despite gaps in the evidence we know enough about the links between social experience and mental health to support the application and evaluation of locally appropriate policy and practice interventions to promote mental health.[24–26] While the published evidence on cost-effectiveness is much more limited, an authoritative review of the evidence[26] indicates that the benefits of positive mental health are likely to be considerable. Interventions targeting parents and preschool children show a high level of effectiveness and cost-effectiveness. There is a robust case for strengthening investment in mental health promotion in schools, increasing educational opportunities for adults, and a variety of interventions to promote mental health at work.

2.5. Resilience and mental health

The vulnerability or resilience of any child or adult is determined by a complex interplay of individual attributes and the social context.[35,36] While positive stress is important for healthy development, resilience is more likely to be acquired or present when a child or adult can avoid strong, frequent or prolonged stress, or when the effects are buffered by supportive relationships.[37] Supportive, sensitive early caregivers in infancy and childhood can increase resilience and reduce the effects of "toxic" environments[38] or major trauma such as a natural disaster. Resilience is an interactive concept, referring to a relative resistance to environmental risk experiences, or the overcoming of stress or adversity, and it is thus differentiated from positive mental health.[39] As in all fields of health, clinical and public health interventions each have a role in improving the chances of resilience among children and adults affected by a disaster or by maltreatment, interpersonal violence or other sources of severe adversity.[35]

2.6. Planning and evaluating mental health promoting interventions

Some interventions have the primary goal of promoting mental health and others are mainly intended to achieve something else, but improve mental health as a side benefit. Activities designed to promote other aspects of health, to reduce risk behaviors such as tobacco, alcohol and drug misuse and unsafe sex, to improve the relationships between teachers and students in schools, or to alleviate social and economic problems such as crime and intimate partner violence, will often promote mental health. Suicide prevention programs in countries or districts will also typically include interventions that promote mental health.

The first step in any community or setting is gathering local evidence and opinion about the environmental, social and personal influences on mental health and the main problems that need to be tackled (for example family violence or poor school attendance) and the potential gains. Local people and experts guide the development of partnerships, and the planning of interventions and their evaluation. Next, a plan of action is agreed and partnerships established. The third step is the evaluation and dissemination of best practices, with attention to maintaining and improving quality over time.[40] Promoting mental health is expected to lead to measurable benefits in overall health, quality of life and social functioning.[41,42]

2.7. Mental health promotion practice

The activities or interventions take place at several levels. Some are distant from the individual, such as policies to tax alcohol products, and others are closer to the individual such as home-visiting health promotion programs.[29] The interventions may be designed to strengthen individuals, with an emphasis on vulnerable people such as displaced persons or malnourished children. They may be designed to strengthen communities (as in community development and neighborhood renewal) or improve living and working conditions (for example adequate housing, and making work conditions safer), with an emphasis on disadvantaged areas and specific sectors or settings respectively. Healthy policies aim to alter the macroeconomic or cultural environment to reduce poverty and the wider adverse effects of inequality on society. These include policies and regulations on legal and human rights, promoting cultural values, encouraging equal opportunities and hazard control.

In countries affected by disasters, the mental health and psychosocial programs now commonly integrated in humanitarian assistance programs include many elements that are designed to promote the population's mental health or do so as a desirable side-effect. This can first be seen in the intimate links between human rights and mental health.

3. Human rights and promoting mental health after a disaster

Mental health and psychosocial programs after a disaster are important in protecting human rights.[2] The programs improve fairness, dignity and participation of the local population. Respect for and protection of all dimensions of rights (civil, cultural, economic, political and social dimensions) are fundamental to promoting mental health and life with dignity.[43] Without the security and freedom provided by these rights it is very difficult to maintain good mental health.

The Bill of Rights and other United Nations (UN) human rights instruments reflect a set of universally accepted values and principles of equality and freedom from discrimination, and the right of all people to participate in decision-making processes. The related legal obligations on governments can assist vulnerable and marginalized groups to gain influence over matters that affect their health. These UN instruments can also guide countries in the design, implementation, monitoring and evaluation of mental health policies, laws and programs. As human rights have civil, cultural, economic, political and social dimensions, they provide a mechanism to consider mental health across the wide range of mental health determinants. They also underscore the need for action and involvement of a wide range of sectors in mental health promotion.

The human rights framework provides additional protection to vulnerable groups, including women and children and refugees who are marginalized and discriminated against in many settings and at high risk for poor mental health. Countries need to adopt specific measures to monitor, safeguard and realize their rights: including the right to goods, services, conditions and facilities that are conducive to mental health.[43] Promoting population mental health in a disaster, just as in settings of poverty and conflict, requires the capacity to identify and monitor protection threats and failures, and respond through social and legal protection.[2]

3.1. Gender, human rights and mental health

Overall, in all countries and especially after disasters, women are more likely than men to be poor and less able to influence personal or household financial decision-making. They are more likely to experience violence and coercion from an intimate partner or other family member. Women are also less likely to have access to the

protective factors of full participation in education, paid employment and political decision-making.[19]

3.2. Promoting mental health and development in resource-poor countries

The conditions found commonly in countries of poverty, human rights abuses and conflict are linked with poor mental health as well as poor physical health and social conditions even before a disaster occurs.[44] There is now a useful consensus that: "…there is a growing body of evidence on how mental health promotion across the lifespan can mediate positive health outcomes for people in scarce-resource contexts. Given the potential to break the intergenerational cycle of poverty and mental ill-health and promote human and broader socio-economic development in (resource-poor countries), mental health promotion can no longer be ignored in these contexts. Placing mental health promotion on the development agenda of (resource-poor countries), is a challenge that requires advocacy across multiple sectors…"[45] The close connections between mental health and other aspects of health and productivity mean that promoting mental health is a necessity in low-income as well as high-income countries.[46]

Communities' own rituals and traditional practices can help people affected by trauma reintegrate into normal life. These rituals may be fundamentally different from Western modes of dealing with trauma, which emphasize psychotherapeutic recounting and remembering experiences. Many traditional rituals instead aim to create a rupture with the past, taking the form for example of symbolic cleansing, of calling ancestors for assistance. Evidence is needed about whether or not they have a positive effect on mental and psychosocial conditions, and strengthening those practices that work.[44]

International cooperation can help generate and disseminate further evidence in resource-poor countries, after a disaster and otherwise. A full spectrum of research methods including qualitative studies allows investigation of the principles, working mechanisms and effect moderators as well as program outcomes. This will build incrementally a valid evidence base for the country or community in question.[47]

3.3. Collaboration of mental health professionals with other sectors

In all countries mental health professionals have a number of roles in promoting population mental health and supporting mental health and psychosocial support (MHPSS) programs. They can be advocates for effective interventions in other community sectors, technical advisers on program development and leaders or collaborators in these programs, researchers, and professional care providers.[48,49] The Inter-Agency Standing Committee (IASC) guidelines[2,50] are a useful resource after a disaster.

The IASC is formed by the heads of a broad range of UN and non-UN humanitarian agencies. It is the primary mechanism for inter-agency decisions in response to complex emergencies and natural disasters. In 2005 in the aftermath of the Asian tsunami, an IASC Task Force on MHPSS in Emergency Settings was established to develop intersectoral guidelines for policy leaders, agencies and practitioners worldwide. The Guidelines emphasise the need for protection and human rights standards, including the application of a human rights framework through MHPSS, and the need to identify, monitor, prevent and respond to protection threats through social and legal protection.

The IASC guidelines[2,50] are designed for use by all humanitarian actors operating in emergency settings at local, national and international levels: government authorities, donors and UN, community-based and nongovernmental organizations. Action sheets outline social supports relevant to the core humanitarian domains, such as disaster management, human rights, protection, general health, education, water and sanitation, food security and nutrition, shelter, camp management, community development and mass communication. The active participation of communities and local authorities is essential for successful, coordinated action.

Using international human rights standards (e.g., the rights to health, education and freedom from discrimination) contributes to creating a protective environment, supports social protection and legal protection, to promote accountability and use of measures and to end discrimination, ill-treatment and violence. Humanitarian assistance helps people to realize rights and reduce violations. Access to housing, water and sanitation for at-risk groups increases their chances of being included in food distributions, improves health and reduces risks of discrimination and abuse. Providing life skills and livelihood support to women and girls may reduce their risk of having to use survival strategies such as prostitution with added risks of human rights violations. Mental health professionals seldom work in these domains, but are encouraged to use this document to advocate to communities and colleagues from other disciplines to ensure that appropriate action is taken to address the social risk factors that affect mental health and psychosocial wellbeing.

3.4. Controversies in the mental health responses after a disaster

The WHO is concerned that some groups are directing disproportional resources to clinical care focused on posttraumatic stress disorder. It argues for a public health perspective that considers all mental problems, ranging from pre-existing severe mental disorder to widespread nonpathological psychological distress induced by trauma and loss.[51] There is also the need to consider the effect of the adverse environmental conditions and risks of human rights violations on mental health and wellbeing.

The disagreements about a mental health program in response to a disaster rests on several points, spelled out in detail in the aftermath of the 2005 Asian tsunami.[1] "Trauma-focused interventions are increasingly provided to large segments of populations affected by disaster in resource-poor countries. However, the interventions that are most often implemented to reduce traumatic stress — one-off psychological debriefing (organized by international and local organizations) and benzodiazepine medication (prescribed by local physicians) — have little evidence of effectiveness, and their indiscriminate application can be harmful. Following disasters in resource-poor countries, foreign clinicians often arrive to promote post-traumatic stress disorder case-finding and trauma-focused treatment in the absence of a system-wide public health approach that considers pre-existing human and community resources, social interventions, and care for people with pre-existing mental disorders."[1] However, psychosocial interventions are seen, often unjustly, to "indicate commitment to nonmedical approaches and distance from the field of mental health, which is seen as too controlled by physicians and too closely associated with the ills of an overly biopsychiatric approach."[1] This separation further divides a care system that is already fragmented.

3.5. Intervention pyramid for mental health and psychosocial support in humanitarian settings

The IASC[2,50] has advised countries to make social and basic psychological interventions available to the whole community through a variety of sectors in addition to the health sector. Such interventions may address widespread distress in people without any disorder or those people with mental disorders who do not seek help within the health sector. These interventions form the

base and mid-level of the intervention pyramid for mental health and psychosocial support: social considerations in basic services and security (advocacy for basic services that are safe, socially appropriate and protect dignity); strengthening community and family supports (activating social networks, communal traditional supports, and supportive child-friendly spaces); focused (person-to-person) nonspecialized supports (basic mental healthcare by doctors in primary healthcare, basic emotional and practical support by community workers); and specialized services (mental healthcare by mental health specialists, e.g., psychiatric nurse, psychologist, psychiatrist) at the peak, to be provided for the relatively few in need of these.[1,2]

Examples of social interventions outside the health sector that tend to be most relevant after a disaster include: (re)starting schooling; organizing child-friendly spaces; family reunification programs; economic development initiatives and involving existing cultural and religious resources. Professionals outside the health sector (for example, in disaster coordination, education, communication, protection, and community development) tend to lead the implementation of social interventions. A basic psychological intervention that may be made available outside the health sector is teaching listening and psychological support skills to a nonhealth community worker. Many social and psychological interventions require a thorough understanding of the sociocultural context, which outsiders typically lack.[1,2] This set of activities and their guiding principles provide a model for promoting mental health and resilience as well as community-based mental healthcare.

3.6. Responding to the needs of adults, children and youth after disasters

Writing after the 2005 tsunami, Silove and colleagues summarized their understanding of the social responses desirable after a disaster.[52] Culturally appropriate social strategies developed with the recipient group are recommended to protect vulnerable people, reunite families and communities wherever possible, create meaningful roles and livelihoods, and re-establish institutions and services (religious, cultural, mental health) that promote communal cohesion and a sense of order.[53] Future research needs to examine more closely the extent to which these broad social interventions influence individual and communal recovery from traumatic stress reactions and prevent more sustained morbidity. Research is also needed to identify more accurately the personal, social and cultural factors that encourage natural recovery from immediate stress reactions and those that predict chronicity and disability.[53] Other needs for research include the following: understanding indigenous concepts and terms for describing stress; and including assessments of a wider range of stress reactions such as complicated grief, separation anxiety, somatoform disorders, feelings of anger, hatred and revenge, impulse control disorders, and substance abuse.[53] Epidemiological studies need to be complemented by intervention studies of the consequences of trauma in the general population and in population subgroups in countries of all types.

3.7. Research priorities for mental health and psychosocial support in humanitarian settings

A consensus-based research agenda was developed through work with an interdisciplinary group of academics, policy-makers and practitioners from regions affected by humanitarian crises.[8] It produced a high level of agreement on the ten most high-priority research questions related to: problem analysis (identifying stressors, problems, and protective factors from the perspective of affected populations); mental health and psychosocial support interventions (sociocultural adaptation and on effectiveness of family- and school-based prevention); research and information management (assessment methods and indicators for monitoring and evaluation); and mental health and psychosocial support context (whether interventions address locally perceived needs). This agenda emphasized the need for practical knowledge. It requires a better alignment between researchers and practitioners, attention to the perspectives of affected populations, and sensitivity to humanitarian crises.

4. Conclusions

Most communities and governments now recognize that disasters have significant adverse effects on the mental health of affected populations, including children, women and other vulnerable groups. However, governments and opinion leaders are likely to be poorly aware of the way that social conditions, especially poverty and disadvantage, mediate many of these effects. They are likely to have little information about the mental health of the population and how it is affected by the policies and practices they introduce across education, employment, social development and other sectors. Nor are they likely to be well informed about the evidence-based options for promoting mental health and wellbeing at a population level, and the help this could give to the recovery and good functioning of the community. There is a limited understanding of mental health and mental illness in most communities worldwide.

The recognition that tackling community recovery after disaster needs to include mental health promotion (as well as clinical care for people with mental illnesses) can do much to improve understanding of mental health and its determinants more broadly. Introducing a mental health and support program, as part of a humanitarian assistance program, accompanied by an appropriate research agenda, illustrates the possibilities for improving the mental health and resilience of a population. It also illustrates the links between mental health, physical health and behavior. The recommended programs are designed to draw on local expertise and partnerships. They demonstrate the need for collaboration between health and nonhealth sectors in promoting mental health and the relevance of mental health promotion for disaster-affected and other countries and communities. The challenge now is to evaluate and refine programs and good practice in mental health promotion after disasters, and then to bring this knowledge to the wider attention of countries worldwide.

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