

Following recognition and referral to the appropriate service, a number of practice considerations should be made. Refugee children are likely to have different constructs of mental ill health, attributions that associate it with their asylum applications, and fears of stigma and deportation. Engaging them and alleviating such misconceptions is thus a major step towards a successful outcome. Their psychological mindedness will vary, as many refugee children first experience predominantly somatizing symptoms, and may require several attempts before accepting a trauma-focused treatment. Involving their carers and initially setting goals of, for instance, risk management while developing a trusting relationship can lead to a therapeutic phase, while they also become more adjusted in their country of reception.

In conclusion, refugee children and young people pose a significant public health challenge across the world. Their complex needs require closer collaboration between mental health and non-statutory services to maximize their respective skills and resources. A comprehensive multi-modal service should include

clear care pathways, case management, evidence-based trauma-focused interventions, consultancy, and training.

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## Why are some individuals more resilient than others: the role of social support

Trauma is an inextricable component of the human condition. Most individuals are exposed to one or more traumas during their lifetime, but there is great psychological and neurobiological variability in how people respond to these events. While the majority of individuals are largely psychologically resistant or resilient to the negative consequences of trauma, a significant minority develop chronic, debilitating psychological symptoms that markedly interfere with their capacity to function; others may initially develop symptoms and recover, or develop late or delayed symptoms over time.

What explains these differences? The answer is complex and only partially understood. Resilience is generally defined as the ability of an individual to bend but not break, to bounce back, and “to adapt well in the face of adversity, trauma, tragedy, threats or even significant sources of stress”<sup>1</sup>. However, this definition primarily focuses on the individual. In so doing, it fails to explicitly acknowledge that individuals are embedded in social systems, and that these systems may be more or less resilient in their own right, as well as more or less able to support the adaptive psychological capacities of the individual. Thus, responses to trauma and significant stressors are determined by multiple dynamic, interacting individual-level systems (e.g., genetic, epigenetic, developmental, neurobiological), which are embedded in larger social systems (e.g., family, cultural, economic, and political systems).

Like resilience, social support is a complex construct with many definitions. One is from Cohen, who defines it as “a social network’s provision of psychological and material

resources intended to benefit an individual’s capacity to cope with stress”<sup>2</sup>; another is from Eisenberger, who defines it as “having or perceiving to have close others who can provide help or care, particularly during times of stress”<sup>3</sup>. There are many facets of social support which, while overlapping to some extent, reflect unique aspects of this construct. These facets include: structural social support (i.e., the size and extent of the individual’s social network, frequency of social interactions); functional social support (i.e., the perception that social interactions have been beneficial in terms of meeting emotional or instrumental needs); emotional social support (i.e., behavior that fosters feelings of comfort leading the person to believe that he/she is loved, respected, and/or cared for by others); instrumental/material social support (i.e., goods and services that help solve practical problems); and informational/cognitive social support (i.e., provision of advice or guidance intended to help individuals cope with current difficulties). These facets of social support can be facilitated and maintained by different systems, including family, community, and state, national, and international systems. Notably, while social support is a key correlate of psychological resilience, it is not universally helpful, as its effectiveness may vary by the type of support provided and the extent to which it matches individual’s needs, which may change over time. For example, among Iraq/Afghanistan combat veterans, perceptions of family members’ understanding of deployment-related concerns (i.e., functional support) was more strongly related to mental health and resilience than structural and instrumental support<sup>4</sup>.

A large body of research has found that psychological resilience is generally fostered by environmental/caregiving conditions during childhood that are loving, emotionally responsive, consistent, and reliable<sup>5</sup>. This work suggests that, when the environment also provides ample opportunities to master challenges and stresses, it can have an “inoculating” or “steeling” effect, which can help promote resilience. Such social and environmental conditions can also support the development of individual attributes and skills commonly associated with resilience, including the ability to regulate emotions, self-soothe, solve problems under stress, form secure attachments, sustain friendships and intimate relationships, and acquire a realistic and positive sense of agency/self-efficacy<sup>5</sup>. However, when the caregiving environment is highly stressful and chaotic, animals and humans are at increased risk for developing exaggerated sympathetic nervous system, hypothalamic-pituitary-adrenal (HPA) axis, and emotional and behavioral responses to future stressors, which can persist into adulthood<sup>6</sup>.

Many features of personality are heritable and some of these, such as extraversion and dispositional optimism, are associated with one's capacity to seek and utilize social support. However, the social caregiving environment may influence whether and to what extent these inherited features are actually expressed. For example, short allele carriers of the serotonin transporter promoter polymorphism were found to be more susceptible to the influence of parenting than long carriers<sup>7</sup>. Positive social support was also shown to moderate genetic risk for depression in maltreated children<sup>8</sup>. There is also emerging evidence that one's social environment may moderate genetic vulnerability to stress by triggering epigenetic modification of genes implicated in the stress response system<sup>9</sup>.

Social support appears to be associated with resilience to psychopathology via a number of psychological and behavioral mechanisms, including motivation to adopt healthy and reduce risky behaviors; feelings of being understood; appraisal of potentially stressful events as being less threatening; enhanced sense of control or mastery; increased self-esteem; use of active coping strategies; and impact of social influence and social comparison. For example, in a study of individuals with cardiac disease, high functional and emotional social support (i.e., perceiving understanding from and confiding in family members, work employees, and the broader social network) was associated with increased use of active problem-solving, a coping mechanism that has been associated with resilience in several traumatized populations<sup>10</sup>.

An emerging body of research has shown that threats to social connectedness, such as rejection and loneliness, activate many of the same neurobiological systems associated with physical threats and fear, including the amygdala, dorsal anterior cingulate, dorsal medial prefrontal cortex, sympathetic nervous system, and HPA axis<sup>3</sup>. In contrast, positive social support has been shown to inhibit activation of fear-related neurobiological systems by activating the parasympathetic nervous system and brain regions, such as ventromedial pre-

frontal cortex, ventral anterior cingulate cortex, right dorsolateral prefrontal cortex, and caudate, which are implicated in the processing of safety cues<sup>3</sup>. Positive social support has also been shown to stimulate the release of oxytocin<sup>11</sup>, which is critical for social cognition and social behaviors, including accurate facial affect identification, social approach, affiliation, perceptions of trustworthiness, and sexual behavior<sup>11</sup>. Oxytocin has also been shown to have anxiolytic effects and to attenuate physiological, hormonal, and brain-level responses to aversive and potentially stress-inducing signals<sup>11</sup>. Overall, positive social support, through a variety of neurobiological mechanisms, can have a buffering effect on physiological stress responses, with a resultant salutary effect on mental (e.g., depression and post-traumatic stress disorder, PTSD) and physical health (e.g., cardiovascular disorders, immune function)<sup>3</sup>.

On the other hand, preclinical and clinical research finds that weak social support and isolation are associated with indicators of compromised physical and mental health. The magnitude of impact of poor social support on all-cause mortality is similar to that of obesity, cigarette smoking and physical inactivity. Social support also influences rates of mental disorders. For example, meta-analytic findings have reported that low post-trauma social support is a consistent risk factor for PTSD<sup>12</sup>.

Psychological interventions to increase individual resilience typically target personal skill development (e.g., training in physical fitness, cognitive reframing, mindfulness, social skills). However, they can also target family and community social systems<sup>13</sup>. For example, there is substantial evidence that one of the most effective ways to increase resilience in a child is to focus on the well-being and child-rearing skills of his/her parents<sup>6</sup>. A number of studies and programs have demonstrated that teaching at-risk parents to understand their own needs as well as the emotional and mental needs of their infant/child may enhance attachment security, and reduce a variety of later maladaptive outcomes, including child maltreatment and criminal behavior.

Social support from one's community can also help foster resilience in the individual. Community members are strongly affected by the coping strategies of other community members, as well as by the community's capacity to prepare for and deal with adverse events and conditions. This becomes apparent during disasters, when individuals who are linked to pre-existing organizations and communities that are well prepared to deal with adversity tend to fare better than those who are not connected to or supported by community<sup>13</sup>. Communities can also enhance resilience in the individual through policies and programs that promote safe neighborhoods, affordable housing, food and employment stability, access to healthcare, effective schools, emergency and disaster preparedness, and ample public spaces for relaxation and exercise.

Like other animals, humans have been endowed with great potential to weather and adapt to trauma and significant stressors. However, for natural protective systems to develop and

operate effectively in the individual, ample social and material resources are necessary. Because resilience is dependent on multiple individual-level systems, which are embedded in larger social systems, future advances in understanding resilience and how to best foster it will require a broad-based multidisciplinary approach.

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