

# Resilience: why it matters and how doctors can improve it

**Resilience is the ability to cope with challenges and withstand pressure. It is subjective and affects individuals differently. Understanding how to build one’s own resilience and being aware when others in the team are struggling is essential for any aspiring clinical leader.**

**R**esilience is a personal characteristic that allows people as individuals, leaders and followers to cope with difficult situations, and not allow these situations to affect them too adversely. In health care, many challenges arise that, depending on the psychological interpretation and emotional response, might cause problems. Just as a palm tree bends in the wind, but does not break, an individual’s personal resilience helps him/her to cope with changing and challenging circumstances.

Resilience varies between individuals and contexts, but is closely linked to the way that people cope with and manage stress, and how they see and address risk. Resilient leaders are able to ‘bounce back’ and recover from setbacks, failures and uncomfortable situations. Good self-esteem, having confidants and being aware of and being able to deal positively with negative ‘chains of events’ is important; however, an individual might deal with adversity very well in one aspect of his/her life or at one time, but not at others (Rutter, 1987). Effective team leaders recognize their own stress and trigger points and are aware of how emotional or challenging situations might impact on the welfare of those with whom they work. *Table 1* gives some different definitions of resilience.

## Organizational resilience

In the NHS, an estimated 400 people in the UK die or are seriously injured each year, with harm to patients from medical errors resulting in around 10% of admissions (Department of Health, 2000). Low resilience results in safety being compromised, leading to adverse events and ‘near misses’ with large financial and emotional costs to all involved. Carthey et al (2001) describe a continuum with extremes of maximum resistance to hazards (i.e. extreme

caution) through to survivable vulnerability on the other end (i.e. greatest productivity). A resilient organization will try to occupy somewhere in the middle – the ‘safety space’ – to optimize both safety and productivity. After a serious event, organizations may revert to high resistance but subsequently, wishing to improve output or feeling easier as the memory of an adverse event disappears, they may drift back towards greater vulnerability (Carthey et al, 2001). A resilient organization will move away from a punitive and reactive stance of ‘What went wrong and who’s to blame?’ to a proactive and supportive attitude of ‘Why are we doing well, what is going right?’

**Table 1. Definitions of resilience**

‘The capacity to recover from difficulties; toughness’ (Oxford Dictionaries, 2016)

An ‘intrinsic ability of a system to adjust its functioning prior to, during, or following changes and disturbances so that it can sustain required operations, even after a major mishap or in the presence of continuous stress’ (Nemeth et al, 2008)

‘A process whereby people bounce back from adversity and go on with their lives. It is a dynamic process highly influenced by protective factors’ (Dyer and McGuinness, 1996)

From an individual perspective, resilience is:

- concerned with individual variations in response to risk
- the positive pole of individual differences in people’s response to stress and adversity, as well as hope and optimism in the face of adversity (Rutter, 1987)
- not the absence of pathology or heroics, but is an ability to cope with adversity, stress, and deprivation
- the ability to maintain continuity of one’s personal narrative and a coherent sense of self following traumatic events
- normal development under difficult conditions (Fonagy et al, 1992)
- composed of four interlinked components: confidence, social support, adaptability and purposefulness (Cooper et al, 2013)

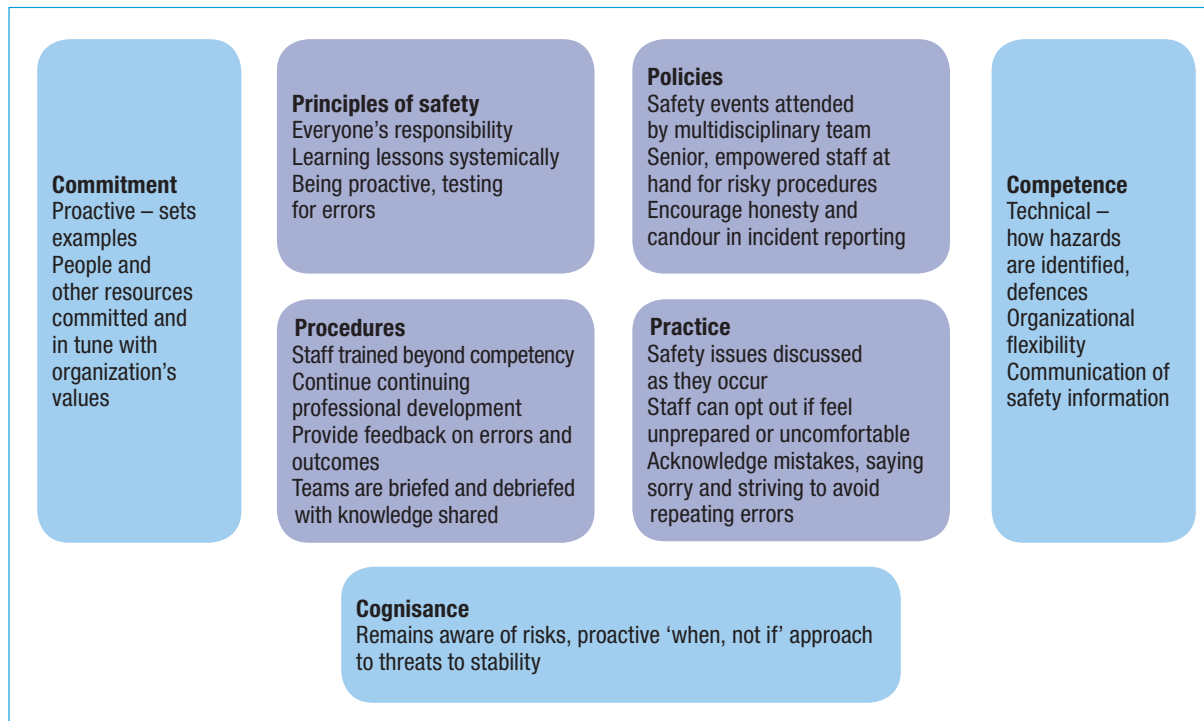
In summary, resilience is: ‘The internal strength and capacity to tolerate stresses, challenges and adverse conditions and an ability to continue functioning at the individual, team and organisational level through personal attributes unique to the individual.’

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Figure 1. The 'three Cs' and 'four Ps' of resilient organizations.



For an institution to build resilience, and keep a balance between safety and high productivity, it needs to maintain stability. This requires a combination of the '3 Cs' of cultural drivers (commitment, competence and cognisance) (Carthey et al, 2001) and the '4 Ps' (principles, policies, procedures and practices) (e.g. Reason 1997, 2008). *Figure 1* summarizes the key features of each aspect.

## Individual resilience

In 2007, Jackson et al carried out a review of the literature on resilience in health care. The majority of the literature considers resilience from an organizational perspective, although papers are emerging on individual resilience. Some individuals have greater individual resilience than others and responses to adversity therefore varies. In response to adverse working conditions, some staff left health care altogether and, of those who remained, some experienced burnout (McVicar, 2003), whereas others appeared to thrive (Tedeschi and Calhoun, 2004).

Resilience is a combination of physical and psychological characteristics. Individuals have homeostatic mechanisms that allow them to cope with stresses, either physical (e.g. injury) or psychological (e.g. emotional stress). In the short term these mechanisms are advantageous and help foster resilience in a specific adverse situation but in the long term, they can be detrimental to health. Bonanno (2004) suggests that resilient individuals maintain equilibrium when stressed, without normal functioning being affected. Resilience appears to be associated with individuals who are intelligent, have self-insight and are curious and adaptive to discovering more. They are also

aware of some of their cognitive biases which may serve to undermine resilience, such as 'pattern seeking' and 'all or nothing' thinking. Such ways of thinking may combine in some people, so that they find it hard to take a positive viewpoint: the 'glass half-empty' perspective. Polk (1997) categorizes characteristics from twenty six papers into four key aspects of resilience:

1. Dispositional: including psychosocial attributes
2. Relational: roles and relationships
3. Situational: explains how individuals evaluate stressful situations
4. Philosophical: encompasses personal beliefs and principles.

High emotional intelligence may also facilitate greater resilience. Schneider et al (2013), using a 33-point measure developed by Schutte et al (1998), found emotional intelligence correlated to attention and clarity of feelings, mood repair, optimism and impulse control, and to 'openness to experience' on the 'big-five' personality dimensions. Higher emotional intelligence is related to lower threat appraisals and less negative affect and response to stress.

## When resilience is low

When it is not recognized that people's resilience is low, significant consequences can arise, particularly relating to their mental health. A General Medical Council review of twenty eight doctors who took their lives while undergoing fitness to practise investigations between 2005 and 2013, found that an organization's or team's approach and prevailing culture can erode resilience. The language used in communications and the perception of

**Table 2. Building and maintaining resilience**

Individual attributes and attitudes	Leadership and the role of leaders
A deep sense of purpose and a goal that provides a focus and commitment to work towards a collective vision	<ul style="list-style-type: none"> <li>■ Shared purpose results in organizational alignment as individuals perceive meaning from their work</li> <li>■ Leaders should inspire followers, emphasize that they are valued by the organization, department, team or project and build a sense of belonging</li> </ul>
Passion for their work, development of mastery and high self-esteem	<ul style="list-style-type: none"> <li>■ Enables greater reflection and ability to weather criticism. Organizations can better cope with change as competent individuals within the organization with control over their own outcomes have greater adaptability (Tearle, 2000)</li> </ul>
Capacity to 'bounce back' and call upon a supportive community	<ul style="list-style-type: none"> <li>■ Acceptance that change occurs in all walks of life, more accepting of things they cannot change and alter focus to those situations they can influence</li> <li>■ A resilient individual gains greater control over response to challenges, with awareness that others will also change and thus calling for strategies to cope with stresses</li> <li>■ Leaders should guide followers through change and the discontinuing of existing practice, introducing new methods and promote behavioural change (Stichler, 2011)</li> <li>■ Minimizing consequences through careful planning and consulting staff is important to aid transition</li> <li>■ Provide the resources to draw from supportive relationships. Sources of support do not necessarily have to be at work but can be from mentors, friends and family, although having supportive colleagues can help progress in fulfilling a leadership and managerial goal</li> </ul>
Ability to be flexible and resourceful; able to appreciate alternatives and ability to find new relationships, processes and connections	<ul style="list-style-type: none"> <li>■ Allows for innovation and development of autonomy among staff, allowing them to share and develop the vision, embracing new ideas and allowing sharing of information and developing ever more resourceful methods to accomplish goals</li> </ul>
A positive outlook for the future, optimism for the present and thrives on opportunities	<ul style="list-style-type: none"> <li>■ Problem solving, greater capacity for developing new skills and effective decision making is associated with individuals who have positive emotions (Goleman, 2003), and those with resilience can appreciate positive qualities and traits in both themselves and others</li> <li>■ Resilient workplaces use problems, mistakes and adverse incidents as an opportunity for learning and development, not punishment</li> </ul>

after Fourie et al (2015)

organizational priorities both contribute to a culture of 'marginalisation' (David, 2014). The General Medical Council now acknowledges the need for emotional resilience training within medical curricula (General Medical Council, 2014), but such acknowledgment and recognition of issues that can impact on resilience varies significantly among leaders, organizations and educators. Given the demands on health workers, there is a pressing need to have support strategies in place.

Resilience can contribute positively to an individual's psychological and physical wellbeing. Greater resilience has a positive effect on both morbidity and mortality, with association between higher positive affect and health (Pressman and Cohen, 2005). Stress and anxiety are significant causes of workplace absence in the UK, with associated financial costs, loss of productivity and further impact on poor health and wellbeing. As resilience declines, a phenomenon of 'presenteeism' can arise where individuals are at work, but not functioning at optimal capacity. Presenteeism can cost almost twice as much as absenteeism and is more prevalent among higher-paid staff

(Sainsbury Centre for Mental Health, 2007), thus highly relevant to health-care leaders and clinicians. Ultimately, stress and poor resilience can lead to 'burnout' which has marked effects on an individual's health, including emotional exhaustion, depersonalisation and feelings of low personal accomplishment. Burnout can result in increased costs to health-care organizations through sickness, high staff turnover, a reduction in the quality of patient care and increased risks to safety (Morse et al, 2012), but can be prevented or ameliorated by enhancing job satisfaction (Ramirez et al, 1996).

## Building resilience

Within pressurised, task-focussed environments, leaders may adopt autocratic leadership and management styles, which can be detrimental to follower wellbeing. Effective leadership that promotes resilience allows for physical vitality, it draws on emotional intelligence and an awareness of the wider environment. Fourie et al's (2015) model of building personal resilience incorporates many dimensions which occur internally (at the personal level)

and externally (at the organizational and societal level). *Table 2* sets out the key features of the model in terms of individual attributes and attitudes, how these play out or impact on teams and organizations, and what leaders can do to foster resilience.

## Conclusions

Organizations, leaders and individuals require strong resilience to help them cope with the challenges that they face, both within the workplace and outside it. A lack of resilience can lead to stress, ill-health and even burnout, with significant risks to the health of individuals and organizations. Some people may leave, with subsequent recruitment costs, reduced productivity and higher workloads for those remaining. Low resilience, stress and burnout have major consequences on patient safety, with technical, knowledge, procedural or individual human errors occurring as a result of what should be routine care. The way in which individuals and organizations respond to errors can be a marker of resilience. Instruments are available for organizations and individuals to measure how resilient they are and behaviours and strategies that promote resilience can be learned by individuals and set in place by organizations and leaders. While resilience cannot guarantee protection against all challenges, it can improve the tolerance and threshold at which a problem begins to become unmanageable. Individuals and organizations should therefore be mindful of the need to proactively build and maintain resilience and reduce stressors as far as possible. **BJHM**

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Bonanno G (2004) Loss, trauma and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *Am Psychol* **59**(1): 20–8 (doi: 10.1037/0003-066X.59.1.20)

Carthey J, De Leval MR, Reason JT (2001) Institutional resilience in healthcare systems. *Qual Health Care* **10**(1): 29–32 (doi: 10.1136/qhc.10.1.29)

Cooper C, Flint-Taylor J, Pearn M (2013) *Building Resilience for Success: A Resource for Managers and Organizations*. Palgrave Macmillan, New York

Davis J (2014) GMC to introduce ‘emotional resilience’ training after finding 28 doctors under investigation committed suicide. [www.pulsetoday.co.uk/your-practice/regulation/gmc-to-introduce-emotional-resilience-training-after-finding-28-doctors-under-investigation-committed-suicide/1/20008791.article?&pageno=10&sortorder=dateadded&pagesize=10#.VYKS1PIViko](http://www.pulsetoday.co.uk/your-practice/regulation/gmc-to-introduce-emotional-resilience-training-after-finding-28-doctors-under-investigation-committed-suicide/1/20008791.article?&pageno=10&sortorder=dateadded&pagesize=10#.VYKS1PIViko) (accessed 28 August 2016)

Degani A, Wiener EL (1994) The four ‘P’s of flight deck operation. In: Johnston N, McDonald N, Fuller R, eds. *Aviation Psychology in Practice*. Avebury Technical, Aldershot: 44–67

Department of Health (2000) *An organisation with a memory: report of an expert group on learning from adverse events in the NHS*. Department of Health, London

Dyer JG, McGuinness TM (1996) Resilience: Analysis of the concept. *Arch Psychiatr Nurs* **10**(5): 276–82

Fonagy P, Steele M, Steele H, Higgitt A, Target M (1992) The Emanuel Miller Memorial Lecture 1992 The Theory and Practice of Resilience. *J Child Psychol Psychiatry* **35**(2): 231–57 (doi: 10.1111/j.1469-7610.1994.tb01160.x)

Fourie V, Woods B, Bluen S (2015) Thriving on Change: Building Personal and Organisational Resilience at South African Breweries. [www.fireglow.co.za/stories-and-results-sa-breweries.php](http://www.fireglow.co.za/stories-and-results-sa-breweries.php) (accessed 28 August 2016)

## KEY POINTS

- Resilience characterizes how people cope with difficult situations.
- Low resilience is associated with burnout, poor safety and adverse events for an organization.
- Presenteeism can arise where resilience is low and costs organizations heavily.
- Resilient organizations show positive attitudes towards the ‘three Cs’ and ‘four Ps’.

General Medical Council (2014) Doctors who commit suicide while under GMC fitness to practise investigation. [www.gmc-uk.org/Internal\\_review\\_into\\_suicide\\_in\\_FTP\\_processes.pdf\\_59088696.pdf](http://www.gmc-uk.org/Internal_review_into_suicide_in_FTP_processes.pdf_59088696.pdf) (accessed 28 August 2016)

Goleman D, ed. (2003) *Healing Emotions*. Shambhala Publications, Boston, MA

Jackson D, Firtko A, Edenborough M (2007) Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: a literature review. *J Adv Nurs* **60**(1): 1–9 (doi: 10.1111/j.1365-2648.2007.04412.x)

McVicar A (2003) Workplace stress in nursing: a literature review. *J Adv Nurs* **44**(6): 633–42 (doi: 10.1046/j.0309-2402.2003.02853.x)

Morse G, Salyers MP, Rollins AL, Monroe-DeVita M, Pfahler C (2012) Burnout in mental health services: A review of the problem and its remediation. *Adm Policy Ment Health* **39**(5): 341–52 (doi: 10.1007/s10488-011-0352-1)

Nemeth C, Wears R, Woods D, Hollnagel E, Cook R (2008) Minding the gaps: creating resilience in healthcare. In: Henriksen K, Battles JB, Keyes MA, Grady ML, eds. *Advances in Patient Safety: New Directions and Alternative Approaches* (Vol. 3: Performance and Tools). Agency for Healthcare Research and Quality (US), Rockville (MD): 1–13

Oxford Dictionaries (2016) Resilience definition. [www.oxforddictionaries.com/definition/english/resilience](http://www.oxforddictionaries.com/definition/english/resilience) (accessed 28 August 2016)

Polk L (1997) Toward a middle-range theory of resilience. *Advanced Nursing Science* **19**(3): 1–13

Pressman SD, Cohen S (2005) Does positive affect influence health? *Psychol Bull* **131**(6): 925 (doi: 10.1037/0033-2909.131.6.925)

Ramirez AJ, Graham J, Richards MA, Gregory WM, Cull A (1996) Mental health of hospital consultants: the effects of stress and satisfaction at work. *Lancet* **347**(9003): 724–8 (doi: 10.1016/S0140-6736(96)90077-X)

Reason JT (1997) *Managing the Risks of Organisational Accidents*. Ashgate Publishing, Aldershot

Reason JT (2008) *The Human Contribution: Unsafe Acts, Accidents and Heroic Recoveries*. Ashgate Publishing, Farnham

Rutter M (1987) Psychosocial resilience and protective mechanisms. *Am J Orthopsychiatry* **57**(3): 316–31 (doi: 10.1111/j.1939-0025.1987.tb03541.x)

Sainsbury Centre for Mental Health (2007) Mental Health at Work: Developing the business case. [www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=4c278a50-8bd6-4aff-9cf3-7667c0770288](http://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=4c278a50-8bd6-4aff-9cf3-7667c0770288) (accessed 21 October 2016)

Schneider TR, Lyons JB, Khazon S (2013) Emotional intelligence and resilience. *Pers Individ Dif* **55**(8): 909–14 (doi: 10.1016/j.paid.2013.07.460)

Schutte NS, Malouff JM, Hall LE et al (1998) Development and validation of a measure of emotional intelligence. *Pers Individ Dif* **25**(2): 167–77

Stichler JF (2011) Adapting to change. *HERD* **4**(4): 8 (doi: 10.1016/j.paid.2013.07.460)

Tearle R (2000) *Ride the Wild Tiger: A story of personal and organisational transformation*. Change Designs, South Africa

Tedeschi R, Calhoun L (2004) Posttraumatic growth: conceptual foundations and empirical evidence. *Psychol Inq* **15**(1): 1–18 (doi: 10.1207/s15327965pli1501\_01)

Weick KE, Sutcliffe KM, Obstfeld D (1999) Organizing for high reliability: processes of collective mindfulness. *Res Organ Behav* **21**(1): 23–81