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Author: Victoria Barbara Pendry

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## PROFESSIONAL PRACTICE

### Compassion and its role in the clinical encounter - an argument for compassion training.

Victoria Wright, Barbara Pendry\*

Medicines Research Group, School of Health, Sport and Bioscience, University of East London, Water Lane, Stratford, London E15 4LZ, UK.

\* Corresponding author:

Email addresses: [b.pendry@uel.ac.uk](mailto:b.pendry@uel.ac.uk) (B.A. Pendry)\*  
[livingherb@gmail.com](mailto:livingherb@gmail.com) (V. Wright)

#### Abstract

Empathic communication, (i.e. emotionally engaging with a patient), is an important part of the therapeutic relationship. It has been shown to improve the health and therapeutic outcomes for patients by improving diagnosis and compliance. In the West, front-line medical professionals, including herbal medicine practitioners, put themselves at risk of burnout and compassion fatigue by giving emotionally intensive care. While treatments for compassion fatigue and burnout are available, another way forward is needed to ensure healthcare professionals do not become ill; one that will enable both patients and healthcare professionals to receive the care needed. In this paper it is argued that compassion, which is defined in this paper, involves different neural circuitry to empathy and can protect healthcare professionals from the effects of stress that can, if not addressed, lead to burnout. Traditional Buddhist meditation techniques such as loving-kindness meditation have been shown to increase compassion in non-meditative states. Short daily sessions of such mediation practices have been shown to improve compassion in a way that protects healthcare professionals from burnout.

## INTRODUCTION

Medical herbalists place great importance on the quality of the therapeutic relationship with patients both in terms of the information exchange needed for accurate diagnosis and in building a trusting therapeutic relationship. In the *Journal of Herbal Medicine*, Adams (2012) discussed some of the issues surrounding empathy in a herbal medicine setting. The first issue was in defining what empathy is.

In recent years, empathy has been the subject of research in both psychology and neuroscience. From this research two "types" of empathy have been expounded. The first is referred to as 'cognitive empathy' and is the ability to identify and understand what another person is feeling. It is sometimes called 'perspective taking' which allows a person to know what another is thinking. 'Affective empathy' is the emotional response we have to the emotions of others. This could be feeling sad, or even crying, when we observe someone in distress or feeling another's fear or anxiety.

Adams (2012) presented research that defined clinical empathy as the "ability to understand the patient's inner experience and perspective and a capability to communicate this understanding" (Hojat *et. al.*, 2002). Adams (2012) also discussed the benefits of this form of clinical empathy to herbal medicine practitioners, some of which include facilitating individualised treatment and improving the adherence to treatment plans.

Since the publication of Adams' research, there has been a body of work that gives further clarity on empathy in the clinical setting. This study builds on this research and introduces the concept of 'compassion fatigue' and defines compassion which leads to the question "is there a role for compassion in a healthcare setting?"

### 1. METHOD

*The Greater Good Science Centre*

The free online course, "The Science of Happiness" (Keltner and Simon-Thomas, 2012) was developed by researchers at the Greater Good Science Centre, University of California. It discussed briefly the importance of compassion both generally and in a

healthcare setting. Initially, research from these researchers and collaborating researchers (including Jean Decety) was investigated. This provided a framework for further research.

### *Literature Review*

A comprehensive literature search was conducted using Google Scholar, Science Direct and PubMed databases. This was not limited by date.

Search terms used to gain information about empathy in healthcare were “Empathy in Healthcare”, “Clinical empathy”, “Cognitive neuroscience”, “Empathy and compassion in healthcare”, “Compassionate empathy” and “Empathic concern”.

For research on compassion fatigue and burnout, the above mentioned databases were searched using the following terms:

“Compassion fatigue in healthcare”; “Compassion fatigue and burnout”; “Burnout in nurses”; “Physician burnout”; “Treating compassion fatigue”; “Accelerated recovery programmes and compassion fatigue”; “Expressive suppression”.

To refine some of the information, the following search terms were used: “Compassion evolutionary analysis”; “Neural circuitry regulation” and “Compassion meditation”.

Additional searches were made using the “Compassion Database” run by the Stanford Compassion and Altruism Research and Education (CCARE, 2014), the Journal of the American Medical Association and Sage publications, and the aforementioned search terms.

### *Selection Criteria*

There is a limited amount of research available on compassion and empathy in healthcare but this has grown in recent years. Aside from some key historic research papers that are heavily cited and those that provide an historic overview, research articles were chosen if they were written in English and were published between 2008 and 2015.

### *Other sources of Information*

Books were accessed at the Bodleian Libraries, Oxford or recommended by the shop at Kagyu Samye Ling Tibetan Buddhist monastery.

## **2. Empathy in healthcare**

*“The function of empathy is not merely to label emotional states,  
but to recognize what it feels like to experience something”*

*(Halpern, 2007)*

Throughout the twentieth century, the medical profession defined empathy in the clinical setting as something that was purely cognitive and did not involve any sort of emotional involvement. It was thought that emotionally engaging with a patient hindered medical practice as it clouded judgement and reasoning i.e. cognitive empathy was thought to be beneficial to the therapeutic relationship but affective empathy was thought to interfere with the ability to make effective diagnoses and facilitate outcomes (Decety, 2014).

In 1995, Stewart (1995) made a systematic review of 25 years' worth of studies on communication in healthcare. She concluded that improvements in communication during case history-taking improved patient outcomes and similarly with improved discussions about management plans. Perhaps the most pertinent aspect of this review is that it hints that improved communication and including a discussion about the emotional wellbeing of a patient can influence improvements not only in this but also in treatment outcomes.

In the 20 years since Stewart (1995) presented her review, there have been a large number of studies looking at how improving communication between healthcare professionals and patients could impact on patient outcomes. Di Blazi *et. al.* (2001) studied the empirical evidence of the therapeutic effect of cognitive and emotional care of patients and, while inconsistencies were found, concluded that "physicians who adopt a warm, friendly, and reassuring manner are more effective than those who keep consultations formal and do not offer reassurance" (Di Blazi *et. al.*, 2001).

However, merely being reassuring can often backfire as patients require as diverse a range of types of communication as there are emotions. Consider a paralysed patient who is angry at the loss of his formerly strong body. A reassuring, friendly approach may cause him to retreat rather than expressing his anger and he could instead think that he was being treated in a disrespectful manner (Halpern, 2007).

Patients rarely express their emotions verbally to healthcare professionals. If healthcare professionals are emotionally attuned, i.e. empathic, to a patient it can guide the tone of interactions allowing patients the space to explore their emotional reactions and therefore feel understood (Suchman et. al., 1997).

Empathic communication may help a patient to feel better but does it really improve patient outcomes?

Jani, Blane and Mercer (2012) presented a number of studies that show improvements in patient outcomes following the introduction of empathy into the clinical setting. These range from a randomised controlled trial of 719 encounters with patients with the common cold who had reduction in severity and duration of symptoms associated with increased empathy; to a study of 710 cancer patients in Germany that shows an increase of quality of life measures.

Both Jani, Blane and Mercer (2012) and Halpern (2003) proposed theories for why this might be the case. Firstly, empathy guides the healthcare professional to what is important to the patient through non-verbal signals and associative reasoning. Being emotionally in tune with the patient allows the healthcare professional to "spontaneously direct attention to some aspects of patient's histories over others" (Halpern, 2003). Doing this builds trust and allows for increased disclosure from the patient that, in turn, leads to a broader picture of the patient and so better diagnosis. In addition, the improved patient-practitioner relationship allows for better discussion over management planning and so improved patient compliance (Roter *et. al.*, 1998). While Jani, Blane and Mercer (2012) end their theory here, Halpern (2003) went on to mention the "growing body of evidence" that suggests that empathy and positive therapeutic outcome may be directly linked.

The direct link has been shown in a variety of studies. Sarinopoulos *et. al.* (2013) looked at functional magnetic resonance imaging (fMRI) changes in patients who received a more empathic patient-centred consultation and found that there was a reduced pain response in the anterior insular when compared with those receiving standard treatment. Seppala *et. al.* (2014) presented a number of such studies including diabetic patients who had better metabolic control after receiving healthcare from physicians who scored highly on empathy scores and a reduction in the severity and duration of the common cold in patients who were shown compassion as measured by the Consultation and Relational Empathy (CARE) questionnaire. The CARE questionnaire measures factors how well patients felt they were listened to and their concerns addressed. More information is available at <http://www.caremeasure.org/>. Other findings from the field of neuroendocrinology support this as they show that "social support "can have profound influences on the hormonal, cardiovascular and immunological response to a broad array of physiological responses" (Decety *et. al.*, 2014). Through prefrontal cortex mediated regulation of the amygdala, hypothalamus and brainstem, there is a direct pathway in which empathic healthcare can affect a range of physiological processes "ranging from glucose metabolism and blood pressure to immunomodulation and neurogenesis" (Decety *et. al.*, 2014).

### **3. Empathy: how it can lead to practitioner compassion fatigue and burnout**

While there is a large body of evidence that suggests that being an empathic healthcare professional has a massive beneficial impact on patients, what impact can it have on the healthcare professional?

*What is burnout?*

There have been many studies in the field of psychotherapy on how treating patients who have suffered from severe traumas can affect the therapist. In particular burnout was described by Maslach (1982) as "a syndrome of emotional exhaustion, depersonalisation and feelings of reduced personal accomplishment" and was largely attributed to organisational structures and job pressures.

In the early 1990's that Joinson (presented in Figley, 2002) studied the emotional effect on nurses caring for patients in a hospital emergency department. Coining the term "compassion fatigue", Joinson described symptoms that included "chronic fatigue, irritability, dread of going to work, aggravation of physical ailments, and a lack of joy in life" (Potter *et. al.* 2010). The definition of secondary traumatic stress disorder can be broadened to include "burnout following empathic care." (Figley, 2002). Figley (2002) defined this as compassion fatigue.

In 2012, Tait *et. al.* (2012) made a comprehensive study of physicians in the USA. Using an adapted version of the Maslach Burnout Inventory, which also measures characteristics such as emotional exhaustion, depersonalization, and low personal accomplishment, they studied burnout across the range of medical disciplines. On average, it was found that 46% of physicians showed at least one symptom of burnout. The study also showed that there were significant differences in burnout between medical specialities. Unsurprisingly, areas such as emergency medicine and general internal medicine had the highest burnout rates while dermatology and pathology had the lowest. Perhaps most interesting for healthcare professionals outside conventional healthcare, is that "family medicine" i.e. general practice was also among the highest in terms of burnout rates. From this it's possible to conclude that practitioners in front-line medical care have the greatest risk from suffering from burnout.

#### **4. Empathy - the cause of compassion fatigue**

Studies in social neuroscience have shown that the expression of pain is governed by two mechanisms: an automatic, reflexive and vicarious neuroregulatory response and a slower, more intentional and cognitive response. It has also been found that those observing someone in pain have a reciprocal reaction to both of these mechanisms, leading the observer feeling a range of emotions from concern for their own personal safety and fear to concern for the other person and compassion (Craig, 2009). This reciprocal reaction, known as somatic sensorimotor resonance, can thus trigger distress within the observer.

While this somatic sensorimotor resonance is an essential building block socially as it promotes empathy and moral reasoning (Decety, Michalska and Akisuki, 2009),



sensitivity to the emotional response exhibited in others can cause distress via this mechanism. Chronic exposure to the pain of others can therefore have insidious, detrimental effects that can lead to compassion fatigue and burnout (Figley, 2002).

## 5. The Empathy Conundrum

It would appear that healthcare professionals are in a catch-22 situation. On the one hand, being empathic towards patients can have a significant advantageous therapeutic affect and yet, the emotional cost of doing so can be astronomical and lead to compassion fatigue and burnout. It could be concluded that healthcare professionals need to "regulate their capacity to empathize with their patients so that their emotional reaction does not interfere with the efficacy of their treatment nor impact their wellbeing" (Decety, Yang and Cheng, 2010).

By studying event-related potentials, a measure of the brain's response to sensory, cognitive or motor stimuli, Decety, Yang and Cheng (2010) studied the emotional regulation of physicians and compared it to a control group by measuring responses to the observation of someone suffering pain. They found that both the short automatic and the longer cognitive responses to observing pain were suppressed in physicians. It has been shown (Butler *et. al.*, 2003) that consciously inhibiting emotional responses can disrupt communication and cause stress to both the healthcare professional and patient alike, including increased sympathetic and cardiovascular responses such as high blood pressure in both. This could also lead to a "down regulation" of observed pain responses meaning that healthcare professionals may underestimate the pain of patients.

This kind of conscious inhibition of emotional responses is referred to as expressive suppression. Studies have shown (Gross and Levenson, 1997) that while people can be good at suppressing signs of emotion this does not lessen the experience of negative emotions. In fact, it can exacerbate the intensity of the negative emotion. Conversely, such suppression does lessen the experience of positive emotions leading to the inability to feel happiness and joy. It may therefore be possible that chronic expressive suppression of the sort that physicians exhibit can in fact lead to psychological disorders such as depression and anxiety (Butler, 2003).

Expressive suppression also has negative consequences on interpersonal relationships outside of a clinical setting as it is an effective way of avoiding interpersonal connection. It has been shown to degrade the quality of long term relationships and can lead to lack of intimacy and marital dissatisfaction (Levenson, 1994).

So healthcare practitioners are left with a conundrum.....

To improve patient care they need to be emotionally engaged with a patient and show empathy. Doing so and being chronically exposed to the sorts of emotional and physical trauma experienced by patients is potentially damaging to their own wellbeing. Yet, consciously regulating their emotional response is also potentially harmful not only to healthcare practitioners but to their patients, family and friends. Is there a solution?

### **Is empathy really needed?**

Given that studies such as that done by Hojat *et al.* (2009) show that empathy declines by the third year of medical school, and that it appears to be so potentially harmful to healthcare practitioners, it is worthwhile asking if empathy is really needed in a healthcare setting.

Bouma (2008) argued that while empathy may have benefits to patients that it is not necessary for physicians to be "good" or that it is ethically required. She argued that some physicians are "male-brained" and are therefore poor at empathising. Moreover, she claimed that some patients prefer physicians who are "forthright, efficient and cerebral, concerned more with diagnosing and treating my disease than my personal life, feelings and concerns" (Bouma, 2008). She also argued that making empathy a mandatory part of healthcare would discriminate against those incapable of being empathic and that encouraging physicians to behave empathetically would just lead them into acting as though they were without really feeling it.

These arguments, however, disregard the understanding of empathy not as being a form of sympathetic concern but as a way of being in tune with the patients' needs (which may well be forthright efficiency) in order to provide the care they need.

Bouma's arguments are contrary to the evidence (as presented above) that empathy really is needed in a healthcare setting to improve patient outcomes. This leaves the questions; can empathy be taught? And if empathy is so important, how can healthcare practitioners be protected from compassion fatigue and burnout?

## 6. Compassion

*"Pay rapt attention to another person over time  
and the quiet energy of love and compassion will rise up"*

Germer (2009)

*Compassionate empathy*

As mentioned above, empathy researchers define a number of types of empathy. Affective or emotional empathy is the kind that may be beneficial for a patients' prognosis but may lead to compassion fatigue or burnout. Cognitive empathy is the detached, emotional control that has long been fostered by some healthcare professionals and that has led to a reputation of being cold. More recently however, a new type of empathy has been defined.

In an interview with Daniel Goleman, Paul Ekman (Professor of Psychology at the University of California), the term compassionate empathy is defined (Goleman 2007 and Goleman, 2008). Compassionate empathy not only allows for practitioners to understand a patient's trauma and feel with them but also be moved to action. This is closely link to how researchers define compassion.

*What is compassion?*

"A feeling of concern for the suffering of others  
that is associated with the motivation to help"

Defining compassion has been somewhat controversial. Goetz, Keltner and Simon-Thomas (2010) reviewed research on compassion and presented three possible definitions.

Firstly, compassion can be defined as another term for the empathetic distress described above. It is possible to vicariously experience another person's emotions through neurological mirroring and such an experience of compassion would be associated with sadness, pity and even fear and pain. The second definition is that compassion is not an emotion in its own right but rather it is a blend of emotions that include sadness and love. Studies of emotional terms have found that participants often group compassion with terms such as love, tenderness and caring while sympathy and pity were grouped with sadness (Goetz, Keltner and Simon-Thomas, 2010). Therefore both of these definitions are not particularly accurate.

The third definition, which is used in this paper, is that compassion is a 'distinct affective state' in response to others' suffering which differs from distress, love and sadness. It is thought that we have evolved to be compassionate beings and that such an emotion is needed as part of the caregiving system, i.e. we are designed to raise vulnerable children and, as Darwin reasoned, feeling compassion at times of need would improve the chance of their survival. In addition, compassion helps to build trust and develop the more co-operative behaviours that are needed to develop alliances with other humans and thus improve the chances of survival. Perhaps the most distinguishing feature of compassion in this definition is that it "incorporates appraisals of one's own resources" (Goetz, Keltner and Simon-Thomas, 2010).

In summary compassion is the feeling that arises when you are confronted with another's suffering and feel motivated to relieve that suffering, taking into account one's own ability to do so.

This means that compassion includes a feeling of being able to cope with the suffering of others and that not being able to cope leads to feelings of distress. If this is true, compassion fatigue and burnout would decrease compassion and increase empathetic distress. Evidence presenting the effects of compassion fatigue and burnout (see above) does in fact concur with this reasoning. In addition, studies such as Batson (1991) have shown that distress leads to a focus on self and compassion leads to a focus on others. Studies of the autonomic and parasympathetic nervous systems also support this line of reasoning. For example, Eisenberg *et. al.* (1991) showed that a decrease in heart rate

occurs when people feel compassionate, whereas there is an increase in heart rate during times of distress.

### *How do compassion and empathy differ?*

The care-giving system and the fear system rely on distinct parts of the brain. It has been shown (see Klimecki et. al., 2014) that empathy involves the anterior insula and anterior midcingulate cortex which are regions of the brain associated with pain processing. However compassion activates the insula, ventral striatum, and medial orbitofrontal cortex which are parts of the brain that are associated with love, reward and affiliation. By training subjects first in empathy and then compassion, Klimecki et. al. (2014) showed that empathy for suffering triggered parts of the brain associated with pain and empathy and that training increased these effects. Moreover, compassion training reversed these effects by strengthening positive affect and activated areas of the brain associated with love and affiliation. In fact, it was also found that compassion training increased positive affect even when subjects were exposed to equally distressing images.

### **Compassion protects**

While still in its infancy, researchers are endeavouring to understand how compassion affects health. Recent studies have found that compassion can protect from depression and even increase life expectancy. Studies such as Brown et. al. (2008) and Poulin et. al. (2013) have shown that social connectedness, in particular helping others, can have great health benefits. In particular, Poulin et. al. (2013) provided evidence that it does this through stress-reduction mechanisms; although this study had a number of limitations as it was not an experimental study and did not account for other factors that may have influenced the outcome of the research. However, in an experimental study, Cosley et. al. (2010) showed that being compassionate, by showing concern for the wellbeing of others, not only enabled participants to receive greater social support but also lowered blood pressure and cortisol reactivity and increased high frequency heart-rate variability.

## Can compassion be taught?

It is all very well presenting findings that show that being more compassionate reduces stress, but, as Bouma (2008) argued, some people are more compassionate than others. So can compassion be taught?

Loving-Kindness Meditation (LKM) is a form of traditional Tibetan Buddhist meditation practice that is designed to increase compassion in the practitioner. It has recently gained interest from psychology researchers as a way of reducing stress and improving immune responses and so treating psychological problems such as depression and anxiety. A wealth of research, including Hoffmann, Grossman and Hinton (2011) and Pace et. al. (2010), has shown that LKM not only reduces stress and improves immune response but also reduces pain (Carson et. al., 2005) and increases social connectedness (Hutcherson, Seppala and Gross, 2008).

In a bid to understand how to improve compassion in a healthcare setting, Seppala *et. al.* (2014) have investigated how 10 minutes a day of LKM can improve compassion and pro-social behaviour. Using active control groups that were designed to have an effect of positive well-being, they found that LKM did indeed improve compassion in novice meditators. They postulate that this would be a useful time- and cost-effective way for healthcare practitioners to increase compassion in their healthcare practice and protect them from the effects of compassion fatigue and burnout. Unfortunately the volunteers for this study were undergraduate psychology students at Stanford University (where the research was done) so further research in a clinical setting is needed to really show whether or not this would be true.

A lot of these studies (for example consider the 15 studies presented in Seppala *et. al.* (2014) ) focus on 8 – 15 week programmes of meditation practice, which could potentially take up time that healthcare practitioners don't have. However Hutcherson et. al. (2008) found that just a few minutes of LKM could increase feelings of social connectedness and compassion.

## 7. CONCLUSION

Although it is only in recent years that empathy and compassion have been considered important in the therapeutic relationship, the research conclusions are clear.

While empathic communication is an important part of the therapeutic relationship as it can lead to improved patient outcomes, it can be detrimental to the healthcare professional. The medical culture that exists in the UK and US means that healthcare practitioners risk giving their patients the care they need at the expense of their own health and wellbeing. This is particularly true for front-line medical professionals; a group to which herbal medicine practitioners belong.

Compassion activates different neural circuitry to empathy and thus protects from the stress associated in suffering. Meditation techniques specifically designed to increase compassion, such as loving-kindness meditation, may offer the answer.

In conclusion, while still in its infancy, research indicates that just a few minutes of daily compassion training (see supplementary data Annex A) can improve therapeutic outcomes for patients and protect healthcare practitioners from compassion fatigue and burnout.

### **Supplementary data**

## **Annex A - Loving Kindness Meditation**

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