Special Article

Beyond Compassion Fatigue: The Transactional Model of Physician Compassion

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Abstract

Physician compassion is expected by both patients and the medical profession and is central to effective clinical practice. Yet, despite the centrality of compassion to medical practice, most compassion-related research has focused on compassion fatigue, a specific type of burnout among health providers. Although such research has highlighted the phenomenon among clinicians, the focus on compassion fatigue has neglected the study of compassion itself. In this article, we present the Transactional Model of Physician Compassion. After briefly critiquing the utility of the compassion fatigue concept, we offer a view in which physician compassion stems from the dynamic but interrelated influences of physician, patient and family, clinical situation, and environmental factors. Illuminating the specific aspects of physicians' intrapersonal, interpersonal, clinical, and professional functioning that may interfere with or enhance compassion allows for targeted interventions to promote compassion in both education and practice as well as to reduce the barriers that impede it. J Pain Symptom Manage 2014;48:289–298. © *2014 American Academy of Hospice and Palliative Medicine. Published by Elsevier Inc. All rights reserved.*

Key Words

Empathy, compassion, compassion fatigue, physician, doctor, barriers, transactional model

Introduction

Physicians are expected to practice medicine compassionately. Indeed, as part of their professional practice statements, professional and medical regulatory bodies in most Western countries stipulate that physicians must practice medicine compassionately.[1,2] Equally, patients and consumers anticipate compassionate caring from their medical professionals.[3–7] Compassionate caring is associated with greater patient satisfaction, better doctor-patient relationships, and improved psychological states among patients.[5] Although compassion is central to the professional practice of medicine, it remains understudied; there are a considerably larger number of studies on empathy[8,9] and compassion fatigue[10–21] than there are on compassion itself. This article briefly reviews and critiques existing conceptualizations of compassion among physicians before outlining the Transactional Model of Physician Compassion in which physician, patient and family, clinical situation, and environmental factors interact to influence physician compassion.

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In explicating this position more fully, it is worth noting that compassion is distinct from empathy.[22,23] By definition, the term "empathy" is generally used to refer to the cognitive and/or emotional processes in which the perspective of the other (a patient) is taken.[24] In contrast, compassion involves or necessitates empathy, but includes the additional step of wanting to help and/or desiring to relieve the suffering of others.[25,26] Linguistically, the term "compassion" is derived from the Latin roots *com*, which means "together with," and *pati*, which is "to bear or suffer."[27] Recent empirical studies indicate that the neural substrates of empathy and compassion are distinct;[22] conceptual reviews likewise support the distinction.[28]

More than just a duty and requirement for medical practice, the capacity for compassion appears to be hardwired among humans and higher mammals. Compassion-like and altruistic behaviors have been observed in several species[29,30] and caregiving toward the vulnerable and wounded is evident among chimpanzees and bonobos.[31] In controlled settings, young chimpanzees and human toddlers tend to help humans who "accidentally" dropped objects in the absence of no obvious benefit or reward.[32] Anecdotally, media are replete with stories of spontaneous assistance from strangers who risk their lives to save unrelated people and animals. Taken together, such data imply that, rather than being a phenomenon that is specific to medical settings, compassion in medical contexts is more likely a specific instantiation of a complex adaptive system that evolved to motivate recognition and assistance when others are suffering.

Compassion Fatigue—A Compassionate Critique

Paradoxically, despite being central to the practice of good medicine, the bulk of studies across the past two decades have been focused not on compassion, but on compassion fatigue.[10–21] The term was coined by Joinson in 1992[33] while studying nurses in emergency rooms (ERs) who were burned out. Compassion fatigue is thus a specific type of burnout that follows exposure to patient trauma and suffering[11] and manifests in marked emotional, behavioral, and cognitive changes in the clinician.[12] Although initially described in ER nurses,[33] compassion fatigue has since been studied in many clinical groups.[10–13,15,17,21] Oddly, and despite being mentioned together with burnout as a common phenomenon among health workers, there are few prevalence studies on compassion fatigue,[19,21] with only two studies among doctors.[18,34]

Although compassion per se is notably absent from such research, the study of compassion fatigue has been important in that it has highlighted burnout and emotional exhaustion among doctors and some of the outcomes that may accompany them—reduction in empathy and compassion, reduced satisfaction in clinical work, poorer clinical judgment, apathy in care, a lack of energy, and even emotional breakdown;[12,13] poorer quality of care, higher patient dissatisfaction, and increased medical errors are thought to accompany compassion fatigue.[35–37] At an institutional level, organizations also bear the costs of physician fatigue via the negative effects on manpower and lost productivity.[38]

As noted, however, and despite being an important and very real phenomenon, the focus on compassion fatigue appears to have led to a paradoxical neglect of compassion itself. Furthermore, the term and concept have several limitations, tending to guide research in particular directions. In the following sections, we briefly consider some of the issues confronting compassion fatigue research more fully before offering a supplementary conceptualization of the origins and barriers to compassion in medical practice.

Other writers have noted that the term compassion fatigue is problematic[14] and is often confused with burnout, secondary trauma, and vicarious traumatization.[12–14,19] According to some, the definition requires secondary traumatization,[11] which limits its relevance to physicians who may struggle to remain compassionate but are not normatively exposed to trauma. Compounding these problems are additional issues with the term itself. To remark that physicians are compassion fatigued tends to imply that doctors have a finite reservoir of compassion that dries up or becomes depleted with use or overuse. Such an approach implies that compassion fatigue (and related outcomes) should be more common with age. Perplexingly then,

and acknowledging that little is known about this link, studies show an inverse relationship between age and physician burnout.[39–42] Although it may be that physicians become less empathetic with time and are thus less burdened by patient suffering, it also may be that compassion is not being depleted. Rather, experience and age may allow doctors to develop better self-management leading to lower burnout and/or to find ways to replenish the resources that are used in their clinical work.

More broadly, compassion fatigue tends to imply that being compassionate is necessarily tiring when, in fact, recent research suggests that compassionate approaches are pleasurable, increase social connections, decrease the focus on oneself, and may buffer against stress.[43] Admittedly, researchers are not unaware of the terminological problems and there have been several suggestions regarding changes.[44]

Beyond issues with terminology and definition, it is our suggestion that compassion fatigue describes a possible "end point" in the trajectory of caring for patients over time. It is, moreover, an outcome that does little to illuminate putative etiologies or the roots of its development. Without insight into the variables responsible for its genesis and progression, potential interventions to mitigate compassion fatigue will be inevitably ill informed; an exclusive focus on compassion fatigue is similar to providing an "ambulance at the bottom of the cliff."

Finally, and as we expand on later, a key part of the problem associated with the compassion fatigue construct reflects its near-monolithic focus on the physician as the primary or sole variable in its genesis. As it is currently studied, the compassion fatigue construct tends to imply that physician characteristics (e.g., experience, training, age, dispositions) are the primary influences on a finite compassion reservoir that becomes progressively fatigued or depleted in the course of their professional duties. However, whereas such a conceptualization is parsimonious and clearly reflects aspects of the lived clinical experience—being compassionate can be tiring—it neglects the fundamentally dynamic and transactional nature of compassion and the multiple physician, situation, patient, and institutional factors that may be involved in the enhancement and/or mitigation of compassion in clinical care. We present an alternative view of compassion and compassion fatigue in which the expression of compassion and the development of fatigue are viewed as end points in a dynamic process at the intersection of physician, patient, clinical, and institutional influences.

The Transactional Model of Physician Compassion

In contrast to the model offered by compassion fatigue research, the Transactional Model suggests that the question of whether a physician will behave compassionately in any given instance reflects the dynamic influences of physician, patient, clinical, and institutional factors. In this view, compassion is not only a function of physician characteristics but reflects the physician in a transactional relationship with the patient, the clinical picture, and the institutional setting. The Transactional Model shares similarities with other transactional approaches such as Engel's biopsychosocial model[45] in which phenomena do not exist in isolation and instead are a product of multiple variables or forces in a system. In Engel's model, for example, a disease is a result not only of an anomalous biological process but is strongly influenced by the patient's psychological state and environment.

Transactional approaches normatively emphasize the dynamic interplay of person and environmental variables in explaining behavior. They are widely used in the study of several phenomena that have similarities with (and relevance to) compassion in medicine, including emotions,[46,47] stress,[48,49] decision-making,[50,51] role performance,[52,53] and psychopathology.[54,55] As applied to the issue of physician compassion (Fig. 1), the Transactional Model of Physician Compassion positions the physician as the person variable, with the patient being treated, the patient's family, clinical situation, physical environment, and concurrent institutional demands defining the relevant aspects of the environment. Although these variables are not truly separable or independent in transactional thinking, we discuss them in turn.

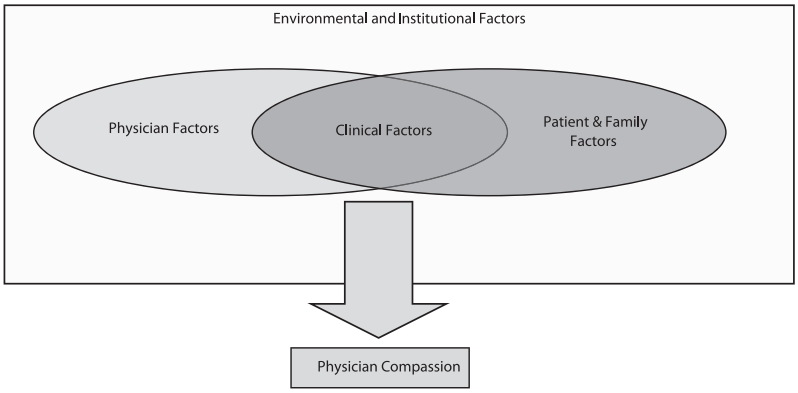

Fig. 1. The Transactional Model of Physician Compassion.

Physician Factors

A physician's ability and motivation to empathize and connect with a patient is necessary to a compassionate response. However, compassion is more complex than being a mere disposition and even with a given physician; multiple factors may impact the extent to which physicians are compassionate. For example, female doctors generally have higher levels of empathy[56,57] and, although it has yet to be empirically demonstrated, may also be more compassionate. Conversely, fatigued or burned out doctors have fewer emotional resources to connect and consequently will find it more difficult to care.[58] More broadly, compassion in medical practice is likely impacted by the physician's personality (e.g., overly critical, judgmental vs. open, tolerant, and patient),[59] baseline level of trait or dispositional compassion,[22] the magnitude and nature of past clinical experiences, and communication skills.[60] The suggestion that multiple variables are implicated in physician compassion is consistent with recent models of compassion in other areas such as carer's compassion,[61] which conceptualizes an individual's compassionate response as involving multiple intrapersonal components.

Variation in the physician factors relevant to compassion means that, given the same clinical situation (e.g., a young depressed teenager in the emergency room presenting with a recent overdose), different physicians will differently evaluate the patient and consequently have varyingly compassionate (or non-compassionate) responses. A tired and stressed emergency physician might view the patient as just another "case" needing processing and referral to the psychiatry services to facilitate opening up a precious emergency room bed. Conversely, a recently graduated junior doctor who has had his or her own struggles with depression might have a more caring approach; one doctor's description of a difficult patient will be different from another's.[59] A physician's personal history, individualized appraisal of the clinical situation, tendency to judge or blame, sensitivity to suffering, ability, motivation, and resources are important factors likely to influence whether compassion emerges in the physician response.

Patient and Family Factors

In contrast to the view implied within compassion fatigue research, the Transactional Model suggests that characteristics of the patient and the patient's family are important influences on physician compassion. Although physicians may strive to be compassionate with all patients, this is easier with some than with others. A kind and grateful patient who follows treatment recommendations without fault easily stimulates the desire to care. Equally, family members who are appreciative and show indebtedness to the physician also promote feelings of tenderness and goodwill that enhances the doctor's desire to help. Conversely, rude, ungrateful, hostile, and repetitive complainers or patients exploiting the health system generate stress,[62,63] anger,[59] and resentment from doctors. Such responses almost certainly interfere with feelings of connectedness and compassion. Patients, who are "likable and deserving of care" (e.g., a

five-year-old boy with leukemia) likely generate more compassion than will be seen in response to a help-rejecting, conceited, "know it all" somatizer. Noncompliant patients are sometimes seen as aberrant[64] and not worthy of care because they undermine the doctor's sense of control.[65] Similarly, a physician's compassion may be negatively impacted by expectations that they will manage the "social" aspects of patient care (e.g., need for housing, post-discharge care, work rehabilitation). Although these factors are crucial in a patient's recovery and improved quality of life, some physicians may consider them to fall outside their single organ focus, which can result in irritable, impatient, and noncompassionate engagement.

Clinical Factors

Closely related to both physician and patient factors are aspects of the clinical picture. Clinical features including alcoholism, drug use, obesity, dependent personality,[59] somatization, and chronic pain[62] are likely a challenge to the physician's ability to respond compassionately. Of particular note are instances in which symptoms or a diagnosis are (rightly or wrongly) seen as stemming from the patient's unhealthy behavior or are otherwise "deserved" (e.g., liver cancer from chronic alcoholism, lung cancer from unmitigated smoking, suicidal depression in a pedophile, recurrent sexually transmitted disease from promiscuity or prostitution). In cases in which the patient is consciously or unconsciously deemed "responsible," a compassionate response is less likely to be forthcoming. In extreme cases, there may be some sense that the patient does not deserve compassion[25] and instead "deserves" the malady as a punishment or bad karma.

Another clinical factor that likely interferes with physician compassion is the complexity of the patient's clinical situation. Clinical complexity can include patients who do not follow an expected clinical course, patients with complex comorbidities, or patients who develop unexpected and unexplainable side effects. In complex situations, a physician's ability to tolerate ambiguity and self-manage his or her cognitive and emotional resources is challenged. When confronted with complexity and threat, physicians are likely to shift from more balanced diagnostic-caring modes to more exclusively analytical and detached mind states. When patients do not improve and/or develop complications, physicians may become anxious and stressed, or worse, blame the patient or the family for not following a treatment plan. Stress, anxiety, and threat stemming from clinical uncertainty almost certainly interfere with physician compassion.

Finally, physician specialization is a variable that may have effects on a doctor's compassion. In addition to the fact that certain personalities are differentially likely to self-select into particular specialties, different fields normatively involve exposure to distinct patient and clinical profiles. Specialties such as oncology, palliative medicine, and psychiatry, in which profound human pain and suffering are dealt with and explored at length, might promote and even encourage a more compassionate response. Such specialties can be contrasted with a busy emergency medicine doctor who has limited time for consultations and is pressured to make quick decisions involving life and death and bed pressure. In such specialties, the combination of dispositional tendencies, the nature of the normative presenting problems, and the institutional "role" of physicians may encourage or even necessitate adopting more analytical and problem-solving modes. Indeed, the simple fact that physicians are required to make very rapid decisions in situations in which lives are at stake may lead to either the perception (or the reality) of less time with patients and the physician being seen as cold, detached, or uncaring. Clinical contexts are clearly central to whether physicians are (and are seen as) compassionate.

Environmental and Institutional Factors

Finally, the physical environment and institutional contexts in which consultations take place can clearly affect physician compassion. Practicing physicians will be aware that it is more difficult to be (or remain) compassionate when the clinical interaction takes place in a busy, open ward where there is no privacy, where other staff interrupt the consultation, or where pagers and patient monitoring instruments are intermittently going off. Repeated interruptions can lead to a physician feeling "under siege," both from the number of patients that need to be seen as

well as from the institutional pressure to discharge patients to open up precious but limited beds.[58] Compounding these demands is that physicians are expected to systematically document clinical interactions, teach junior doctors and medical students, and fulfill administrative demands including justifying clinical care to insurance companies. Feeling that one lacks control in the workplace can cause stress,[58] and environmental and institutional factors of this kind appear similarly likely to inhibit compassion. In litigious environments,[63] the threat of lawsuits hang over each doctor's neck. In a toxic practice milieu, a doctor can shift from a state of wanting to connect and relieve patients' suffering to that of being threatened or blinkered, and caring more strongly about the management of their own anxiety.

Implications From the Transactional Model of Physician Compassion

Conceptualizing compassion from a transactional perspective involving several interrelated yet potentially modifiable variables allows for targeted interventions to promote compassion and reduce the barriers that impede it. As mentioned, there is a dearth of research on the factors that may facilitate or deter compassion among physicians, as studies have focused on assessing an outcome variable—compassion fatigue. Before we can develop interventional studies, valid and reliable measures of both physician compassion and the factors that inhibit or promote compassion are sorely needed. The Transactional Model contains several implications for developing interventions among physicians and patients as well as for medical education and ongoing professional development among physicians.

As the main agent for compassion, the physician is the first logical target for intervention. Potential areas for physician intervention include education on the nature of compassion as well as on the benefits the doctor, the patient, and their families can derive from compassionate clinical care. In time-pressured environments, physicians often appear to feel as if a "trade off" between clinical tasks and the "soft bits" of medicine must be made. Helping physicians to understand that rather than merely being a consumer preference, compassion is central to their ability to relate to their patients and effectively conduct their clinical duties. Similarly, providing physicians with basic knowledge regarding the promoters and inhibitors of compassion can inform both better self-management (e.g., working out under which circumstances or for which patients their own compassion drops) as well as better management of the work and institutional environments. Another area of physician intervention lies in training doctors how to manage their expectations of patient behavior and outcomes. In particular, doctors have to learn how to tolerate clinical ambiguity and uncertainty[66] without becoming noncompassionate. Acceptance of the wide panoply of patient characteristics (e.g., likable or not) and disease course outcomes may help limit physician frustration and anxiety.

Several intervention studies have been shown to increase empathy as well as compassion directed toward the self and others. A landmark study of primary care physicians undergoing an intense eight-week program on mindfulness meditation, self-awareness, and communication found sustained improvements in physician empathy.[67] Work in other samples is also promising. An eight-week compassion meditation training protocol resulted in participants being more likely to aid a "sufferer" compared with a waitlist control,[68] and a two-week compassion training protocol promoted greater altruistic behavior.[69] Compassion cultivation training programs promote improvements in compassion for others, receiving compassion from others, and self-compassion[70] and mindfulness-based interventions show comparable effects.[71]

Many of the compassion intervention protocols involve training in mindfulness and Buddhist-informed compassion meditation exercises. Developing a state of mindfulness may allow health care professionals to more effectively self-regulate emotions, remaining balanced and focused on the present despite interpersonal, clinical, and institutional challenges. Compassion training enhances a practitioner's ability to 1) be aware of others' suffering, 2) develop concern for others, 3) wish to relieve that suffering, and 4) be ready to relieve that suffering.[70] Within the

Transactional Model, such interventions primarily target physician variables, enhancing the doctor's ability to remain resilient and connected with patients.

As the recipient of compassion, patients and families can influence the expression of care from the doctor. Interventions directed toward patients' communication styles[70] and relationship enhancement with their doctor can make the rapport smoother. Potential areas of patient training include ways to communicate effectively and the creation of realistic expectations regarding both clinical outcomes and a doctor's ability to effect change. Although it will be hard to practice in the midst of a medical crisis, helping patients to see situations from the perspective of the medical professional may enhance the relationship and reduce criticism, leading to physicians feeling less pressured and thus more able to be compassionate.

From a work environment perspective, limiting unnecessary interruptions during the consultation and providing adequate privacy to allow better communication and rapport development may enhance relationships and thus increase physician compassion. Institutional interventions might include provision of adequate protected time for patient and family contact as oftentimes the demands for administrative, documentary obligations, and teaching clash with the delivery of actual care. From a relational perspective, work environments should encourage togetherness, collegiality, and mutual support among different disciplines and within the medical hierarchy instead of promulgating an atmosphere of rigid pecking orders and a culture of bullying.[72] Despite limitations in resources, compassion can flourish if institutions endorse and embolden whole-person care of patients, their families, and the doctors themselves.

Concluding Remarks

Compassion is a central and necessary aspect in the effective delivery of medical care. It is a professional requirement for physicians, is desired by patients, and, although research is preliminary, appears to benefit patient and clinical outcomes. To this point, however, research has primarily focused on compassion fatigue, a concept that is useful insofar as it highlights a very real phenomenon among physicians but has serious limitations and fails to illuminate interventions. We have suggested that the scientific study of compassion in medicine may be enhanced when conducted within a transactional framework in which compassion is viewed as stemming from the dynamic interactions between physician, patient, clinical, and institution/environment factors. The Transactional Model of Physician Compassion offers a framework within which to identify and organize the barriers and facilitators of physician compassion and thus better inform future interventions aimed at enhancing physician compassion.

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