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Compassion in a Doctor-Patient Relationship: Objectively Measuring Compassionate Behavior Using the Emotional Availability (EA) Scales

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Abstract

Most research on compassion utilizes self-report measures. Subjective report of the individual can provide an authentic window about compassion toward the self. Compassionate behavior toward another person, on the other hand, can and should be measured more objectively than self-report allows. Compassionate behavior toward another can best be measured by how that individual actually interacts with others. In this essay, we will describe how behavior that is compassionate can be objectively measured, and one that has a wide evidence base in developmental research on parent-child relationships—the concept of "emotional availability" or EA. We believe that this construct also is applicable to doctor-patient relationships, including the qualities of sensitivity, appropriate structuring, nonintrusiveness, and nonhostility. We believe these qualities are important to measure in a

doctor-patient relationship, during the medical school admissions process, and during medical training.

Keywords
Compassion; doctor-patient relationship; compassionate behavior; Emotional Availability (EA) Scales

1. Introduction

Compassion has been described as the "feeling that arises in witnessing another's suffering and that motivates a subsequent desire to help" [1]. Ekman further has described proximal as well as distal compassion, referring to proximal compassion as the impulse to help the immediate suffering of another, with engagement of the full range of the individual's emotions [2]. Distal compassion, in contrast, is described as referring to a more cognitive process about avoiding dangers in the future that can bring about suffering. The noun compassion comes from Latin and means "sharing of affliction or suffering with another" (www.etymonline.com). It is also related to the noun patient, meaning one who is suffering (www.merriam-webster.com)

2. Empathy

While compassion has not yet been systematically studied in the doctor-patient-relationship, the related construct of empathy has been a target of surveys investigating patients´ opinion about their doctors´ empathy. Empathy and compassion are often used interchangeably, but in fact, empathy refers to feeling what another feels [3], whereas compassion is about feeling for and having a cognitive understanding of the suffering [4]. In addition, compassion includes prosocial motivation and behavior, which is manifested as the wish to care for the other and help the other. For example, neurobiological data on psychopaths indicate that they cognitively understand the suffering of the other, but do not care or have an impulse to help that suffering [4]. The few studies which have dealt with measuring doctors´ empathy by patients´ report have applied questionnaires, such as the Jefferson Scale of Patient's Perceptions of Physician Empathy (JSPPPE) and the Consultation and Relational Empathy Scale (CARE) [5, 6]. While the JSPPPE targets perspective taking, the CARE was found to capture the atmosphere of the doctor-patient interaction and to reflect doctors´ capacity to listen, reassure, and support the patient. Notably, patients´ evaluations do not correlate with doctors´ self-assessed empathy, outlining the challenge for doctors to interact in a way that is perceived as such by their patients [7].

3. Empathy Versus Compassion

We follow Singer and Klimecki that empathy [4]:

"Refers to our general capacity to resonate with others' emotional states irrespective of their valence — positive or negative — empathic distress refers to a strong aversive and self-oriented response to the suffering of others, accompanied by the desire to withdraw from a situation in order to protect oneself from excessive negative feelings. Compassion, on the other hand, is

conceived as a feeling of concern for another person's suffering which is accompanied by the motivation to help. By consequence, it is associated with approach and prosocial motivation" (p. 875).

Therefore, medical doctors need to have or learn compassion, while limiting empathic distress. To our knowledge, there is no empirical research on compassion in relation to the doctor-patient relationship.

4. Emotional Intelligence (EI)

A related and larger concept to both empathy and compassion is "emotional intelligence". Emotional intelligence has been conceptualized by Salovey and Mayer as "the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior" [8]. This general definition was later broken down and refined into four proposed abilities: perceiving, using, understanding, and managing emotions in the context of interpersonal dynamics. Emotional intelligence is measured as a trait of the individual, rather than as a quality of specific relationships, and includes such qualities as self-reported assertiveness, self-confidence, independence, as well as empathy.

Higher emotional intelligence was found to positively contribute to increased empathy in the doctor-patient relationship (in three studies) (as reviewed by Arora et al., [9]). A recent study found that emotional intelligence is an important quality in pediatric residents and that they scored higher than the general population in emotional intelligence [10]. Further, some components of emotional intelligence increased over the course of medical training, specifically increases in assertiveness (e.g., speaking up about patient safety concerns), which may be related to the acquisition and mastery of knowledge. On the other hand, these residents showed a decline in empathy over the course of residency training, a finding that has been echoed in other studies and outlined in a systematic review [11]. It is curious that as these professionals acquire more experience, they become more confident and assertive, but lose some of their empathy. Reasons for the loss of empathic ability need to be explored and ameliorated. If medical programs select empathic individuals, this would definitely be a positive. However, medical training programs also need to "take care" of their doctors in training in a more systemic way, for example, by interacting with them in respectful ways in classes and during clinical experiences. In short, helping doctors in training maintain their empathy should be a clear goal of medical training programs and the profession at large.

5. Compassion Versus Empathy Versus EI

There is overlap between compassion and emotional intelligence (EI): Compassion includes the ability to adequately perceive emotions of others including emotions in complex affective states (which involves suffering) which is a facet of emotional intelligence. However, the link is limited since compassion describes a deep emotional, cognitive, and motivational capacity, while EI is a cognitive trait that can be used to help people but it can also be a trait that manipulative individuals use [12] and not necessarily aimed at helping in the context of suffering or avoiding dangers in the future that can bring about suffering. As noted earlier, empathy has been conceptualized as a component of EI, but it is a component that has been found to decrease over

the course of medical training [10]. We are not aware of any studies examining the empirical link between EI, compassion, and empathy, however.

6. The Measurement of Self-Reported Compassion

As is the case for EI and empathy, most empirical work on compassion also has used self-report measures [13-16], rather than interviews or behavioral observations. Qualities as self-compassion need to be reported by the individual. On the other hand, compassion for others can best be measured by how that individual actually behaves in the relationship and whether the recipient perceives such behavior as compassionate. We believe reports of self-compassion are critical in understanding the doctor-patient relationship, but objective measures are also needed.

7. Measurement of Compassionate Behavior through A Multidimensional Framework

The position set forth in this essay is that to be compassionate in the eyes and heart of another, one needs to actually behave and relate with the patient in an emotionally connected manner. Further, it is the physician's behavior that needs to be interpreted as compassionate by a patient in a doctor-patient relationship specifically.

Goetz et al. wrote about compassion-related display behaviors and asked "what a nonverbal display of compassion might look, sound, or feel like" and summarized such behaviors [1], such as facial actions, posture, vocalizations, and tactile contact [2, 17, 18]. Further, Bowlby described that infants rely on emotion display behaviors (distress sounds, arm reaches to be picked up) to initiate compassion in their caregiver as a way to create attachments with the caregiver [19]. Such varied emotional expressions and display rules are brief snap shots of a global sense of emotional connection that is called "emotional availability" to another.

To measure compassionate behavior, we thus draw on work from the pediatric literature on parent-child relationships and the use of the Emotional Availability (EA) Scales [20, 21].The EA Scales describe and capture the emotional climate in dyadic relationships, and have a wide evidence base in the developmental literature in children ages 0-14 years and their parents [22]. Biringen et al. conducted a selective review of EA studies and reported strong inter-rater reliability [22], as well as good validity, in its relation with both parent (such as well being, self efficacy) and child outcomes (such as emotion regulation, positive affect, social competence). An exhaustive review by Lotzin et al. on parent-child interaction measures (2015) indicates that the EA Scales are the most commonly used measure of observed parent-child relationships in the field, and is used in the US for all the major subcultures, as well as some 25-30 countries [23]. This concept is different than "emotional intelligence" in that it is not a trait, but a quality of the relationship between two people. Thus, it is conceivable that someone has a trait-like quality of emotional availability if s/he interacts in emotionally connected ways with a myriad of people. It is also possible, however, that some people are emotionally available with a small number of people, and not particularly spectacular in group contexts (e.g., public speaking). In addition to the pediatric version, the system has also been conceptualized to apply to a wide range of relationships, including the couple's relationship, with early support for its applicability in this type of relationship [24].

The EA System will now be used in doctor-patient relationships (EA-MD). The EA-MD will be tested on whether it is suitable for being part of an assessment procedure for applicants of

medical schools. For the instrument to be used objectively, established training and inter-rater reliability must be obtained, as is the case with the original measure that is used to evaluate adult-child relationships [20-22]. Each of the dimensions below are from the original scales, but have been modified to fit the doctor—patient relationship, here focused on family medicine practitioners since they are likely to have ongoing contact with their patients over a long period of time. Each EA dimension is measured on 7-point scales.

8. EA Sensitivity/Insensitivity

The emotional availability (EA)'s sensitivity component is perhaps the dimension of the emotional availability concept that has the greatest overlap with empathy and compassion. Swain & Ho define compassionate parenting as: (1) effective care-giving behaviors (behavioral contingency), (2) parental emotions that are coherent and connected with child's emotions (emotional connection), and (3) awareness of own and other's cognitions and emotions and other environmental factors (reflective awareness) [25].

When described in the language of EA, a doctor may be highly sensitive or highly insensitive, regardless of the particular style. For example, the highly sensitive professional may be low-keyed, gentle, and soft-spoken. Alternatively, s/he may be gregarious and/or even vivacious. A family medicine doctor may be expected to be particularly empathic with both the child and the child's parents, and implicitly convey "I'm with you", although other types of doctors also need to be able to convey such. It is the genuineness, authenticity, and natural quality of the affect (facially and posturally) that is the essence of what is referred to as bedside manner [26]. A sensitive professional would use a solid, warm handshake at entry, with an en face positioning to the family, and warm, caring, curious, and "I am in the moment with you" demeanor. Such qualities would be a great start to the information sharing that is so important in a session, and may even enhance what the patient is able to or willing to share with the doctor, including side or adverse effects of medications or even that s/he has not consistently adhered to the treatment regimens in the medical records. In addition, the doctor-patient relationship and the healing process benefit immensely from a doctor respecting the patient, when he/she accepts where the patient stands. The above would be qualities that would be evaluated high on the sensitivity scale.

Furthermore, a doctor scoring high in sensitivity shows clarity of perception and appropriate responsiveness, flexibility and timing. He or she would be able to correctly recognize a patient's signals and to adjust his or her behavior accordingly. For example, when taking a patient's history, a sensitive doctor will recognize a patient's hesitation to talk about a very personal matter and reassure this patient that the information will be kept in confidence. This will prevent the professional from missing out on important information. In addition, in situations where the patient or the family may be very emotional or worried, a sensitive doctor acknowledges their emotional state and is able to regulate these emotions first in order to get information or guidance across. Beyond being able to regulate others, sensitivity in a doctor requires him or her to self-regulate first before being able to regulate others. Furthermore, a doctor's flexibility is needed for example in case of non-compliance and to find creative ways to explain complicated procedures. A sensitive doctor is able to quickly shift his or her focus in order to be emotionally available in a busy clinical setting, to be with this particular patient at this particular time.

A doctor who is detached and rarely speaks or cannot be understood easily when s/he does speak, or who looks away in gaze as s/he speaks to the family may have some challenges in conveying compassionate behavior. Similarly, incongruence in channels of communication can be a problem. If a mild-mannered, verbally expressive and knowledgeable doctor forgets to sit down to speak with a family in the en face position, but instead stands with his/her hand on the door knob, the patient will intuitively feel that there is a mismatch between body language and verbal language stating that all is well. Such inconsistencies in channels of communication can leave a patient feeling unattended to and insecure. A doctor with a general demeanor of "outranking" a patient will have issues with patient commitment, adherence, and trust. These qualities would indicate a lower rating on this scale, or indication of further areas of intervention for the professional's development. The EA sensitivity dimension is perhaps the closest to ideas about empathy and compassion since sensitivity is about emotional connection, but we also believe the other dimensions of EA provide important information about communication skills as well as the value system of the physician. For example, if a physician embodies an authoritarian or hierarchical value system, s/he may not worry about being overstructuring or understructuring, about being overwhelming and intrusive, or about making jokes that border on hostility. Thus, EA provides a multidimensional view of behavior that is compassionate.

9. EA Structuring/Unstructuring

Structuring refers to the ability of the doctor to guide in a way that is well received by the other (or the family who is accompanying the patient). In other words, if the professional does structuring but the patient (or accompanying parents or family) are emotionally unengaged in the process, the professional's structuring would be viewed as lower than if the patient were emotionally engaged and "took to" the suggestions and scaffolding of the doctor. For example, if a doctor is explaining care after a procedure and perceives that the patient or family do not appear to understand, an appropriately structuring professional would be able to pause and reframe the guidance until all of that information appears to be absorbed. Or, a primary care doctor may decide not to dictate that the slightly overweight teen begin to lose weight immediately, but instead might use more indirect guidance and motivational strategies to help the teen to adopt healthy eating styles and incorporate some walking and other activities into a regular day. It is after all challenging to structure people before they are motivationally ready to be structured.

Furthermore, a professional's ability or interest in structuring may begin even before the first visit, with a decision to see or not to see patients who are running late. Does one see the patient and not give them enough time, or does the doctor set an ironclad rule of late means no appointment. For doctors, timing is particularly challenging, as structural conditions in clinics may not always allow for flexible timing. While each professional might choose to adopt an approach that works for them about start and end times, ultimately, the patient does benefit from some guidance on what is acceptable in a particular context, either prior to or at the very first session, since some health care contexts have to move at a very fast pace.

On the lower end, a doctor may be either inconsistent about structuring or be so "hands off" that s/he knows little of what is going on. For example, large medical centers are often teaching contexts for medical students, residents, or fellows. The unstructuring or "hands off" physician may delegate so much to others that s/he knows little of what is really going on, certainly to the

detriment of patient care. These would not only be rated lower, these qualities would be important to evaluate in health care contexts, as they often are associated with medical errors and negligence.

10. EA Nonintrusiveness

Nonintrusiveness refers to the professional's ability to be available without intruding and taking over the patient's autonomous thinking or behavior. A non-intrusive doctor is aware of the other's personal space and boundaries of shame and does not violate these. He takes the patients reactions to his approaches into consideration, is capable of adapting his behavior accordingly, and takes a step back if necessary. These qualities would be considered nonintrusive and rated on the high end of the 7-point non-intrusiveness scale.

On the other hand, a professional who does not give a patient the chance to finish a sentence may be seen as intrusive. For example, if a mother is interacting in an insensitive manner with her baby, and the family medicine practitioner reaches over and redirects the patient "out of the blue", then he or she is being intrusive, especially if the doctor does this in a physically interfering way. A doctor verbally interrupting the patient, not listening to what the patient is saying, making frequent use of commands also can be considered as verbally intrusive. Physical intrusiveness can also occur when a doctor touches a patient's body despite clear signals that the patient doesn't feel comfortable. Without a doubt, such behaviors would be rated lower on this global 7-point scale.

11. EA Nonhostility

Nonhostility refers to ways of talking to or interacting with the patient that are not abrasive, impatient, or antagonistic. The ability to relate to patients and staff (especially in the presence of patients) in a nonhostile manner would appear to be a key feature of emotional availability, and would be rated high on this 7-point scale.

On the other hand, if a doctor seems to be preoccupied with his/her own thoughts, not present, and periodically yawning, these would be signs of covert hostility. The patient will perceive this and not feel welcome. There may also be overt signs of hostility and may be manifest in gallows humor or other kinds of jokes. When a doctor makes jokes about any patient, this is disrespectful and hostile, although the humor component makes it seem acceptable. Yet, such humor is at the expense of one who is suffering (whether the patient is present or not) and conveys a lack of compassionate behavior. After all, if one jokes about the suffering of a patient, she or he is not feeling or able to display compassion. This particular dimension of EA is not only dyadic but it is also very inclusive in that hostility to others in the wider world also impacts the doctor-patient relationship. For example, if a doctor is dismissing of a nurse in the presence of a patient, this can feel hostile to the patient and hurt the alliance with the patient. Because the context of the doctor-patient relationship is a limited one, there will be limited ways in which the doctor may show hostility; therefore, any such signs are telling. A doctor would be displaying some hostility if she or he states that the patient keeps getting recurrences of his cancer because he is a very negative person. Such signs of hostility should be differentiated from realistic feedback, however. If a patient may be able to change his or her attitude in order to cope with a health crisis, this would be better called "feedback" than "hostility", but of course there are ways of using

verbal and nonverbal language so that one is still displaying compassionate behavior. Medical students should be trained in recognizing the difference and acting accordingly. There are so many ways to get patient's commitment without being intrusive or hostile, and it would be immensely helpful if doctors were able to use some of these "methods".

12. Training Doctors in Emotional Availability

One of Daniel Goleman's most memorable statements is that emotional intelligence can be taught [27]. In a clinical way, most medical education involves some training in communication skills and in forming a trusting therapeutic relationship, with regular feedback by senior doctors. Best practices include observing doctor-patient conversations behind one-way glass before taking over doctors' everyday duties. Through mentored experiences, medical students also learn to take over responsibility for "their own patients", being closely supervised by senior doctors. Training communication skills should not stop when finalizing medical school but should be continued. Video-based supervision is entered in the regular training of psychiatrists focusing on the therapeutic relationship; this approach could be integrated into doctors´ training in general.

Although empirical evaluation for training doctors is scarce, one such study was conducted by Dugan et al. with otolaryngology residents, with repeated self-report assessments of emotional intelligence [28]. The program (which involved training using simulations of high-stress situations) showed significant promise. However, as has been noted, a problem in this area is that self-reports are used. While convenient, they do not convey sufficient information about objective assessments. Programs to train doctors in emotional availability (a more behaviorally observable set of qualities) will likely be an important next step that involves evaluation based on actual behavior, although our focus thus far has been the assessment rather than the development of programming to improve EA in doctors.

13. Concluding Comments

We believe that the affective and compassionate quality of the medical doctor-patient-relationship can and should be captured using objective behavioral measures. In order to encourage medical faculties and teaching institutions to put further emphasis on the doctor-patient relationship in both medical student selection and medical student training, we are now developing and testing the "EA-MD" in a collaborative project based at the University of Heidelberg in Germany.

Although years of experience as a doctor may hone one's skill in the profession and place the doctor in a higher zone of emotional availability [29], we also believe that some enter the medical profession with a higher capacity, which likely is perceived by others as bedside manner. If a doctor may not have such natural leanings, can compassionate behavior be cultivated? Our thought is that it is better to select individuals who already understand and demonstrate a sufficient dose of compassion. However, we also believe that many can be trained to behave and interact with patients, especially if such social/emotional competencies are part and parcel of medical training programs. In addition, doctors should be taught strategies on how to protect themselves from empathic distress and how not to cut ties with their compassionate skills over the course of their careers. Given the limited nature of the doctor-patient relationship, we believe

that such cultivation or training can help the doctor to reach a higher level than when they entered the medical profession.

Author Contributions

Zeynep Biringen wrote the first draft of this manuscript. Sabine C. Herpertz and Anna Fuchs conceptualized the doctor-patient application of the EA concept and contributed to the presentations on emotional intelligence and empathy. Erin K. Biringen provided overall feedback and many of the examples of doctor-patient relationships in relation to each of the EA dimensions; she also helped with the overall writing.

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Competing Interests

Author ZB has disclosed a potential financial conflict of interest because she developed the Emotional Availability (EA) System described in this paper and potentially stands to gain from favorable empirical findings. As such, she distances herself from involvement in data analyses and has a conflict of interest management plan with Colorado State University. Given this is an essay, there are no competing interests related to this.

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