Nonverbal Communication: The Forgotten Frame

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> *. . . expression in itself, or the language of emotions, as it has sometimes been called, is certainly of importance for the welfare of mankind . . . we may conclude that the philosophy of our subject . . . deserves still further attention, especially from any able physiologist.*
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> Charles Darwin [Charles Darwin (1892) The Expressions of the Emotions of Man and Animals. John Murray, London, p. 387]

17.1 The Research on Nonverbal Communication: From the Beginnings to Recent Redefinitions

In the modern age, the scientific study of the nonverbal dimension that exists in behavior and communication started 150 years ago with Charles Darwin, who made important observations and theorizations from an evolutionist perspective [1].

Almost 100 years later, in the 1960s and 1970s, a revival took place, thanks to the development of *audiovisual technologies*. Whereas written text had always provided an effective means to analyze verbal productions, what lacked was something similar to analyze the rich but elusive dimension of nonverbal communication (NVC).

Dating back to this period, Paul Ekman's now classic studies focused on the analysis of facial expressions and their possible coding. These studies led to various

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findings. Notable among them is that there are a few emotions that have an innately common basis worldwide, both in terms of expression and interpretation. Happiness is unequivocally recognized. Moreover, most people can easily distinguish between a true expression of happiness and one which is affected and unnatural (curiously enough, the zygomaticus major muscle is only used during smiles that reflect *true* happiness). Other emotions that are generally recognized (even in cultures lacking specific words to label them) are sadness, anger, a combination of surprise and fear, and shame; disgust is sometimes mistaken for anger, for contempt, or a mixture of the two [2]. Important cultural determinants of facial expressions and their interpretation have also emerged from these studies.

Ekman and Friesen created the *Facial Action Coding System* (FACS) in 1978. The FACS allows for the classification and representation of any visible facial expression, in terms of a combination of action units of different parts of the face (the periocular region appears to be especially important and rich with differences). The FACS has also been used in research on medical relationships/contexts (an example is Vanessa Greco's work in pediatrics) [3].

Robert Rosenthal, a biologist at the University of Harvard, moved in a similar direction with his *Profile of Nonverbal Sensitivity* test and then with his research on gaze, tones of voice, kinesics, and so on [4–6].

Over the last 20 years, then, attempts to objectify the manifestations of NVC have led to prosperous developments in *computing*: one of these developments, *face tracking*, has been used to create algorithms to detect the faces of individual people, especially for security purposes; it has also been used to draw up sophisticated programs of artificial intelligence, notably in robotic devices [7–9].

The abovementioned research quickly revealed the close association between the NV dimension and emotions during communication between conspecific subjects. It is estimated today that almost 90 % of an emotional message is delivered through nonverbal channels.

17.2 The Origins of an Interactionist Perspective

Already in the 1970s, however, important developments were taking place, also spurred on by the ethological research of Hinde [10] and Eibl-Eibesfeldt [11]. Attention was drawn to a wider, interactionist perspective, to a whole body dimension, and to contextual components of this, like studies on kinesics and body motion communication by Birdwhistell [12] and studies on proxemics—which especially examines the value of physical proximity and/or distance between communicators—by Hall [13] and Morris [14].

Important studies on gaze also date back to this period. When two people converse, gaze has a regulative value for their coordination. The listener watches and observes much more than the speaker. The speaker looks at the listener only in key moments or at the end of his/her speech. The listener's gaze, however, together with nods and other gestures, is fundamental to the speaker, whose speech, lacking this kind of "mirrored" support by the listener, is likely to become incoherent. For

this topic, one can consult studies published by Argyle and Cook [15] and Condon and Ogston [16]. These were also the years when Jean Cosnier and his collaborators started their important work at the *Laboratoire d'éthologie des communications* at Claude Bernard University in Lyon. Since the 1970s, the Laboratoire has conducted extensive research on NVC about doctor/patient relationships from an interactionist perspective [17].

17.3 A Wider Perspective on Nonverbal Communication: Relationship, Empathy, Coordination

17.3.1 Content and Relationship

Around the same time, a broader conception of NVC emerged, thanks to the studies by the Palo Alto group and to Gregory Bateson's work in particular. A well-known aspect of Bateson's thought is his distinction between verbal message—regarding content—and nonverbal message—regarding the relational aspects of communication. But Bateson actually posed the question in much broader and more significant terms [18]. He wrote:

> There is a general popular belief that, in the evolution of man, language replaced the cruder systems of other animals. I believe this to be totally wrong . . . it is very clear that the coding devices characteristic of verbal communication differ profoundly from those of kinesics and paralanguage (p. 411).
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> . . .the kinesics of men have become richer and more complex, and paralanguage has blossomed side by side with the evolution of verbal language. Both kinesics and paralanguage have been elaborated in complex forms of art, music, ballet, poetry, and the like, and even in everyday life, the intricacies of human kinesics communication, facial expression, and vocal intonation far exceed anything that any other animal is known to produce. The logician's dream that men should communicate only by unambiguous digital signals has not come true and is not likely to.
>
> I suggest that this separate burgeoning evolution of kinesics and paralanguage alongside the evolution of verbal language indicates that our iconic communication serves functions totally different from those of language and, indeed, performs functions which verbal language is unsuitable to perform (p. 412).

In other words, Bateson strongly emphasized the specificity and extraordinary richness of the nonverbal dimension, both in itself and in the rich nonverbal dimensions that accompany any spoken utterance (paralanguage).

> . . . non verbal communication is precisely concerned with matters of relationship—love, hate, respect, fear, dependency, etc—between self and vis-à-vis or between self and environment and that the nature of human society is such that falsification of this discourse rapidly becomes pathogenic (ibid, p. 413).

In short, Bateson claimed that any communicative exchange occurs at two levels, which can be either *congruous or contradictory*.

17.3.2 NVC and Context

Another important contribution by the Palo Alto group and by Bateson especially is their reflections upon the concept of context. In Bateson's thought the word "context" encompasses a wide range of meanings: we can here define it as the overall situation where communication occurs—both "here and now," and as the "history" of the previous contact between the people concerned. If lacking context, words and actions do not have any meaning at all [19].

The doctor/patient communication is an excellent example of the importance of context: many of the gestures and exchanges occurring during a medical examination, for instance, would be typical of intimacy and familiarity in other social contexts. But in fact, the "medical examination context" affords them different values and meanings (and disrespecting the rules of such context can soon create ambiguities). It is also clear that the same way of communicating can have very different values and meanings depending on whether we are talking to a patient in fairly good health or to a patient in critical condition, whether we have known the patient for a long time or have never seen him/her before. Furthermore, communicating something painful has different values depending on whether the doctor/patient relationship has had a positive or negative and turbulent background.

Among the many contributions made by the Palo Alto group, we must also mention Virginia Satir's "in-family" therapy. She was the one who first pioneered the "sculpture" technique, in which family members express their emotions and relationships not in words, but through gestures and bodily attitudes.

17.4 Recent Studies and Redefinitions of Nonverbal Communication

Over the course of the 1990s, further research led to new discoveries and theories in child psychology, general psychology, the neurosciences, systemic psychotherapy, and the epistemological domain. These studies deeply redefined the scientific and philosophical paradigms of the *mind/body relationship*. Together with what we have already mentioned in this chapter, these new definitions can significantly change conceptions of what is commonly defined as "NVC." It is beyond the scope of this chapter to delve deeply into these vast fields of research and theorization, but we can point out four currents of clear interest.

17.4.1 At the Origin of Nonverbal Exchange

Throughout the 1980s, the mother/child relationship was explored in important observational studies. These revealed human inclinations toward NV exchanges from infancy, as well as their importance in the infant's well-being and growth: see studies by Threvarthen [20], Meltzoff [21] and Stern [22]. It is exactly thanks to nonverbal exchanges, rhythms, tones of voice, gazes, gestures, and so on that

children and caregivers can become attuned to one another: perceiving both the other and themselves, at the level of emotions, intentions, shared attention, and moods, in a constant co-modulation of states of mind/attention/action.

17.4.2 Nonverbal Communication and Different Forms of Intelligence

Harvard psychologist Howard Gardner is famous for his theory of multiple intelligences. Among these we find intrapersonal intelligence and interpersonal intelligence. Gardner believes *intrapersonal intelligence* is the ability to understand one's own emotions and to channel them in socially acceptable ways. Conversely, *interpersonal intelligence* is one's ability to interpret other people's emotions, purposes, and states of mind, also thanks to the ability to "read" and understand NVC [23].

Daniel Goleman, another Harvard psychologist, based upon neuroscientific studies on the relationship between the brain and emotions (Joseph Le Doux's work in particular), has theorized that "emotional intelligence" is a meta-ability, determining how well we can use our other capabilities, including our intellectual ones. Furthermore, on the basis of perception studies, Goleman pointed out that, through our perceptions, we form intuitive judgments even before rational judgments [24]. Gardner's and Goleman's research drew attention to what occurs in the doctor/patient relationship and encouraged educational and preventative programs meant to improve emotional intelligence in children and adults alike. Education about reading NV messages is of crucial importance in these programs.

17.4.3 Nonverbal Communication and the Brain: The Mirror-Neuron System

One group of researchers at the University of Parma pioneered an important area of study on so-called *mirror-neurons*—a line of work that began by studying the brain of macaques, but ultimately was extended to work on humans. Mirror-neurons were discovered in specific localizations of the human brain, and this mechanism of mirroring between conspecifics was found to be so elaborate and complex that it was termed the "Mirror-Neuron System" (MNS) [25]. In short, when two people meet, the co-activation of neurons takes place in both the person who is enacting emotional expressions and the observer. In other words, the groups of neurons activated in the observer are the same ones activated in the one expressing emotions.

This is true for various dimensions of behavior, including those related to emotional facial expressions and to experiences like touch and pain [26–28]. The MNS is also deeply involved in immediate intuitive comprehension of the intentions underlying other people's actions [29].

In essence, the observer understands the other person's emotions and intentions thanks to a mechanism of *embodied simulation* and to a shared bodily state with the performer of the expression. As explained by Vittorio Gallese, these intersubjective dynamics of "empathetic" comprehension are automatic: they induce subjects to coordinate their actions and are also the basis for the development of more sophisticated social strategies [30, 31].

All of this emphasizes a crucial issue: the NVC actively involves both interlocutors, thereby allowing each to enter into the other's experience, often unconsciously.

17.4.4 Consciousness and Emotions

For decades, Antonio Damasio has conducted experimental studies in neuroscience, generating a vast amount of theoretical work over that time. He observes that, until recent times, both neuroscience and cognitive science afforded emotions a very cold shoulder. Emotions were too subjective, it was said; they were too elusive and vague, and reason was presumed to be entirely independent of them [32]. Contrary to this, Damasio's extensive experimental and theoretical work has been directed at reconstructing substantial relationships between the body, brain, emotions, and consciousness. Moreover, he does this from an evolutionist perspective, emphasizing the concepts of homeostasis and of organism. For these concepts, he took inspiration from Edelman and Bateson.

We cannot explore the whole body of Damasio's work. We can, however, point out that he believes emotion to be an integral part of reasoning and decision-making processes, for better or for worse. Having studied lesions in specific regions of the brain, he also claims that the selective reduction of emotions is at least as prejudicial against rationality as excessive emotions. Well-directed emotions can constitute a system of support without which reasoning cannot work effectively. He also emphasizes that spontaneous and genuine nonverbal signals are activated by complex cerebral structures outside our voluntary control. Moreover, the voluntary imitation of emotions is perceivable as false: there is always some inconsistency, either in the configuration of one's facial muscles or in one's vocal tone.

17.4.5 Body Language and Psychotherapy

The last 20 years have witnessed growing interest in NVC within the field of systemic/relational psychotherapy. Body language has proven to be particularly important in patients with psychosomatic disorders, that is, when emotional and relational conflicts turn into somatic symptoms. Among the various models of intervention, we recall the technique of "family sculptures": families give visual and spatial representations of themselves and of the relationships between the various members through gestures and gazes, games of distance and proximity, bodily use of space, etc. To examine this technique in further detail, one can review

studies conducted by Virginia Satir [33], Philippe Caillè [34], and Luigi Onnis [35, 36]. Hidden aspects of emotional life are always deeply rooted in bodily perceptions; their reactivation is facilitated by emotional and body languages.

17.5 Some Aspects of Nonverbal Communication

The review we have conducted thus far reveals the complexity of the nonverbal dimension: perception and self-perception, emotions, relationships, and aspects of consciousness, all interplay within NVC. We now highlight some of the most important features of NVC:

a. First of all, it is *constantly at work*. We are immersed in NVC all the time. We cannot fail to communicate at this level, because we have a body; even keeping silent is, therefore, a form of communication. This is even more prominent in ambiguous situations like medical examinations. Patients go to see their doctors "because they do not know"; and the more they fear what they do not know, the more they try to interpret the doctor's signals, especially nonverbal ones.
b. *It is two-way*: I perceive the other, more or less consciously, but I also perceive myself, and the relationship between these two perceptions. I find myself smiling, for instance, if the other person is smiling at me; on the other hand, my facial and body muscles tighten if the other has a sharp, strained, and penetrating voice, thereby sending me messages of fear, rage, or hostility.
c. It has a *psychophysiological basis*: NVC concerns bodily dimensions linked to vital functions like breathing (affecting our tone of voice), heartbeat, skin temperature, secretions, the conditions of our face and body muscles, and so on.
d. It is largely *out of our conscious control* and often *translated into verbal terms with difficulty*. Apropos of this, Bateson wrote: *"If this general view of the matter be correct, it must follow that to translate kinesics or paralinguistic messages into words is likely to introduce gross falsification due not merely to the human propensity for trying to falsify statements about 'feelings' and relationship and to the distortions, which arise whenever the products of one system of coding are dissected on to the premises of another, but especially to the fact that all such translation must give to the more or less unconscious and involuntary iconic messages the appearance of conscious intent. . . . From an adaptive point of view*, ***it is therefore important that this discourse be carried on by techniques which are relatively unconscious and only imperfectly subject to voluntary control****. . ."* [37].
e. *It goes beyond the visual dimension*. In the world we presently live in, the visual dimension ("How do you see me?") is overestimated. With my eyes I can express emotions and, at the same time, grasp the other's state of tension or relaxation, his way of occupying space, the amplitude of his gestures, his reactions to touch, and so on. There are, however, other significant messages like a person's odor, depth and tone of voice, and rhythm of speech. Equally

significant are the messages I send and that I simultaneously perceive as a "feeling of myself."

f. *It is related to temporal dimensions, context markers, spatial relations, and more*. An example of the rhythmical and temporal dimension is alternating between active communication and silent listening—as is typical of a medical examination. Several studies have revealed, for instance, that doctors usually interrupt patients at the beginning of the visit, typically within 18–20 seconds; they do this to ask questions referring to protocols that might help them to characterize the patient's problem [38]. It can happen, however, that patients attribute other meanings to these interruptions. They might think, for example, that "the doctor isn't interested in what I am saying. . ." or that "the doctor is in a hurry, he has other matters to attend to." Consequently, patients might feel that the doctor is not really interested in them or their problem.

g. *As for context markers and spatial relations, medical consultations are very clearly* characterized. There is a clear gap between unfamiliarity and intimacy. Doctors and patients often hardly know each other or do not know each other at all. Nevertheless, their relationship classically involves dimensions that can be very private for the patient. Socially customary physical barriers break down, and personal emotional/psychological factors—whether manifested or hidden—come to be involved in both, the doctor and the patient. Distances, spatial movements, gestures, and tones of voice, therefore, take on contextual meanings.

h. *It has important cultural dimensions*. Nowadays, doctors typically see and treat patients from a broad array of distinct cultures, between which nonverbal signals can be conveyed and interpreted in very different ways. Based upon the results of a large study published in 1970, Watson classified cultures into either "contact" or "noncontact.'" In "contact cultures" (e.g., Arabs, South Europeans, Latin Americans), people are more likely to interact face-to-face, as well as to approach, touch, and look at each other much more often than in "noncontact cultures" (e.g., Asians, Indians, North Europeans). Gazes can cause misunderstandings. For example, a piercing glance can be considered insolent by Africans and Asians, while a poor gaze interaction can be considered a signal of inattentiveness or rudeness by Arabs and South Americans. The whole field of touch and physical approaches also varies according to different cultures [39].

i. *It has a complex relationship with verbal content*. As stated above, verbal and nonverbal messages do not necessarily coincide. Furthermore, they have different pragmatic implications. The nonverbal dimension can be a sort of comment confirming what is being said, but it can also either give special shades of meaning to the verbal content or it can clash with the very heart of the message. The expression "Relax!," for example, if directed at a patient about to undergo an unpleasant medical test, can totally clash with an authoritative or excited voice or with brusque gestures. Likewise, a request to an elderly patient to "cooperate responsibly" can be contradicted by a tone of voice that infantilizes him. A request for cooperation to a colleague can also be belied by subtle gestures of

impatience, facial expressions exhibiting annoyance or contempt, or other forms of NVC.

On the other hand, however, NVC can be of help at difficult times. Bad news, for instance, can be made less painful if delivered with a grave but empathetic tone of voice. A simple gesture, a pause, or silence can also be of help, as occurs in the following dialogue between a patient and his doctor, who have had a long-lasting relationship (from Walter F. Baile et al. [40]):

> Doctor: *I am sorry to say the X-rays showed the chemotherapy does not seem to have worked (pause). Unfortunately, the tumor has advanced.*
> Patient: *I feared so (cries).*
> Doctor: *(moves his chair closer to the patient, offers him a napkin and waits) I know it is not what you would have wished to hear. I would have wished the news to be better.*

The nonverbal dimension, in other words, offers *a substantial contribution to doctor/patient coordination*, to information gathering, to sharing intentions, and to the general construction of the doctor/patient relationship. This is true both for the "here and now" and for the creation over time of a cooperative relationship of trust.

This is also true, of course, for the *relationships between healthcare workers* in various contexts. Those who work in operating theaters, for instance, know that most times a simple look, an excited or calm tone of voice, or the rhythm of the work being performed can all be specific signals either aiding with coordination or creating obstacles and tension.

Likewise, nonverbal and relational dimensions of communication, whether we recognize them or not, are constantly at work in the ordinary life of a hospital ward where, among other things, they affect the general work atmosphere, potential opportunities for (or obstacles to) cooperation, and the potential clarity or ambiguity of informative messages.

17.6 Obstacles to the Involvement of Nonverbal Communication in Medical Practice

In recent years, operational, scientific, and cultural environments in the healthcare world have evolved in terms that strongly hinder healthcare providers paying attention to NVC. Even if it is constantly present in the workplace, NVC remains a "blind spot" in healthcare workers' awareness and education. In a medical system based on the mechanization of its practices, awareness of NVC and its implications can be seen as an obstacle or a potential source of operational chaos.

After all, doctor/patient communications often take place in very unnatural situations: under strict time pressure, in the presence of a computer or medical equipment (from echocardiographs to respirators); and all of this may make the doctors look away from their patients. Considering what we said about the

importance of gaze for coordination, this might make it more difficult for the patient to express him/herself and for doctors and patients alike to coordinate.

It often happens in hospitals that the emotional, nonverbal, and bodily dimensions are tacitly delegated entirely to medical attendants, who therefore contribute significantly to the flow of communication and to patients' well-being, often without having received adequate training in the awareness and good use of these dimensions.

On the other hand, the specific medical cultural context does not favor NVC. We have witnessed an eclipse of medical semeiotics, an overestimation of "data," and the conception of words as mere "content." Technology has tended to shift the whole of medical culture largely toward a visual dimension—and to diagnoses by images in particular—thereby neglecting other channels of information and communication. Furthermore, making diagnoses outside the boundaries of standard guidelines involves the risk of appearing "negligent," sometimes even with legal consequences.

Patients themselves are accustomed to a certain way of conceiving medicine: they share both the idea of the body as a machine and the illusion of its control, and they expect doctors to behave according to certain procedures. This is, however, in conflict with their need to be recognized as people; thus, they are often dissatisfied because they do not feel accepted. This is one of the reasons why "alternative therapies" are so successful: here a central role is played by relationships, empathetic communication, and patient empowerment (e.g., the co-construction and the sharing of decisions).

Last but not least, we can say that, notwithstanding the profound reasons why one chooses the medical profession, all the topics listed before might influence the vocational training of doctors. One interesting study compared the evolution of medical versus psychology students during their university education. At the beginning of their programs, their motivations were the same: feelings of empathy for those who were suffering and a desire to help them. However, by the completion of their curriculum, future doctors exhibited a considerable decrease in their level of empathy, whereas psychologist trainees did not [41].

17.7 Why Awareness of the Nonverbal Dimension Can Be Useful in Medical Professions

In conclusion, why should the issue of NVC be of interest to doctors? Let us now consider some possible benefits of such interest, particularly from the perspective of certain critical aspects of contemporary medical practice.

Crisis in authority: Today, before going to see a doctor, patients often gather information from various sources (e.g., online), thereby forming opinions about their problem, its possible treatment, and other issues. Doctors, then, cannot rely on the heritage of professional authority that they used to enjoy. Confidence and trust, therefore, must be created over the course of the doctor/patient relationship and regularly reaffirmed [42].

Reduced legal risks: If patients feel accepted and have a good relationship with their doctor, they generally will be less likely to develop a belligerent attitude and might therefore hesitate to file a complaint in cases of perceived or real medical error. They will probably be more understanding and more willing to accept human limits and share the distress of possible errors with their doctors.

Reduced burnout: In the long term, all helping professions cause chronic fatigue. This threatens the professional's health and increases their risk of making mistakes. If doctors are overburdened, or work in non-optimal conditions, their natural instinct could be to minimize relational engagement, merely following "objective" procedures, conforming more and more to routine guidelines—like relying on medical equipment and tests and sending patients to a number of specialists, etc. However, an increasingly mechanical practice is likely to worsen the problem. Conversely, willingness to develop relationships reintroduces vital dimensions into professional practice, in this way helping to reduce burnout. Doctors and patients can so bring richer dimensions into the context, dimensions that are nearer to their complexity as living organisms—and this is an important contributor to the health and well-being of both parties'.

Increased patient compliance: Several studies have shown that a good doctor/patient relationship has positive consequences for treatment. It also activates a positive dynamic, thereby increasing the patient's trust of their caregiver. A good relationship helps patients to be more willing to take their medicines as prescribed (co-construction of sense), reduce arbitrary interruptions, and deal with treatment side effects (*affecting compliance*). In cases of complex treatment, a good relational atmosphere helps patients to deal with possible feelings of rejection of treatment protocols, equipment, procedures, and so on. Some studies have shown that patients' knowledge or ignorance about treatments, together with their psychological state, affect both pharmaceutical action and therapeutic effects [43].

Placebo effects: Recent studies have also shown that the overall effectiveness of treatments is affected by cognitive and emotional processes, in which an important part is played by the "ritual," emotional and relational dimensions of the doctor/patient relationship. Particularly interesting in this scenario are studies on the placebo effect, which mostly works at a subconscious level [44]. Nonverbal components of the relationships can, therefore, play a significant role in how effective treatment is.

Diagnostic efficiency and the sustainability of medical services: In the past, doctors used to rely on their own personal sensorial skills to make diagnoses (through examination procedures like palpation and auscultation). They also relied upon their relationship with their patients to obtain therapeutic effects, keeping some sort of "shamanistic" tradition alive. These dimensions—which refer to the body, affectivity, and imagination and are constantly at work—have been clouded and replaced by technology. However, technology could and should support medical practices in an "and/and" framework instead. Conducting the typical semeiotic examination and letting patients go into the details of their symptoms and their onset means entering both the bodily/emotional and historic dimensions, allowing the clinician to access a broader range of information.

Related to this topic, we cite the importance of *Narrative Medicine*, as introduced and formalized by Rita Charon [45]. Narrative Medicine suggests that doctors build a better relationship with their patients, and helps them to do so, because the narrative dimension yields a more complete view of the patient's biopsychosocial context. In this way, pathology is not a casual accident in the patient's life, but can be understood in a wider dimension and with greater meaning. This, together with the evidence obtained by technology, can help both clinicians and patients grasp how the biopsychosocial and environmental dimensions are interwoven processes that give meaning to the disease. They might also contribute to avoiding unnecessary tests and examinations, in this way aiding the economic sustainability of medical services.

17.8 Conclusions

What we have considered in this chapter emphasizes the importance of NVC as a skill that is useful to all medical professionals. It is, of course, crucial to psychotherapists and psychologists, but also important to physicians, whether they are front-line general practitioners or specialists who see patients in either an outpatient or inpatient setting. Hospital attendants, social workers, and therapists who work in rehabilitation also can use NVC skills. What makes a difference is that they are aware of this dimension and of its relationships to the cognitive, emotional, and epistemological dimensions. In essence, clinicians need to learn how to spontaneously but respectfully communicate through nonverbal channels. This entails overcoming the operational and epistemological obstacles of the biomedical approach and deconstructing its scientific image. It also requires deep reflection at various levels (epistemological, anthropological, social, etc.). Otherwise NVC, even if constantly at work, will remain a blind spot in clinical perceptions and medical practice.

It is therefore important for medical students to receive such education that helps them to become aware of their own prejudices (both professional and personal) and emotional world. This does not entail producing "true" descriptions of emotions; it means instead attaining suitable language to talk about emotions and to create an agreed-upon dimension for them. It then means learning how to meta-communicate about one's own emotional responses, thereby reducing the risks of confusion, contradiction, conflicts, and misunderstandings.

In conclusion, health professionals should acquire narrative competences, so as to be able to talk and reflect upon themselves, integrating verbal and nonverbal codes in their relationships with patients and colleagues, allowing them to both communicate better with others and enhance their perceptions of self. The main training tool may be experiential workshops, which can offer activities like writing and autobiographical narratives, as well as experience observing how the body expresses itself.

With respect to psychotherapy, only formalized training (at least to the level of a *counselo*r) can afford the nonverbal dimension its proper frame. Indeed, being so

deeply connected to emotional life, both on the side of the patient and therapist, NVC has an all-important role in the therapeutic process and should be attentively considered and experienced while therapists are in training. While the type of psychotherapy training one receives can vary depending on the methodology used, many schools pay special attention to the nonverbal dimension [46].

As stated above, NVC does not depend upon conscious control; there are, therefore, no easy "formulas" for mechanical use. What is important is "feeling," and not just "understanding," what goes on while communicating.

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