DOI:10.1515/tperj-2017-0014

# Verbal, non-verbal and paraverbal skills in the patient-kinetotherapist relationship

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### **Abstract**

Human being's existence is closely related to communication, how the individual interacts and interacts with others. By communicating, an individual conveys information and interests, attitudes, values, beliefs and feelings, sharing them with others, thus creating a contexture of relationships. Communication means not only speaking, writing, but also silencing, listening or acting. Both the patient and the physiotherapist communicate verbally, non-verbal and paraverbal to respond to and understand the behavior of the communication partner. In addition to professional skills, acquiring communication skills by physiotherapist can lead to patient adherence and satisfaction to the therapeutic program.

*Aim*: In this paper, we aim to highlight the important aspects of the verbal, non-verbal and paraverbal skills of the physical therapist to promote communication with the patient in the therapeutic relationship. *Methods*: Literature review was the method of this study and were considered eligible only articles with statistically significant data.

*Results:* Verbal communication essentially validates the message transmitted, non-verbal skills confirm and at the same time strongly influence communication partners. By form, paraverbal and non-verbal communication are concurrent with the verbal, respectively confirming it, but by content and interpretation, they can give other meanings to the relationship.

**Key words**: abilities, verbal communication, non-verbal communication, paraverbal communication, physiotherapist, patient, therapeutical process, pacient, proces terapeutic

### Rezumat

Existența omului este strâns legată de comunicare, de modul în care individul interacționează și relaționează cu ceilalți. Comunicând, un individ transmite pe lângă informații și interesele, atitudinile, valorile, credințele și sentimentele sale, împărtășindu-le cu ceilalți, creeându-se astfel o țesătură de relații. Comunicarea înseamnă nu numai a vorbi, a scrie, ci și a tăcea, a asculta sau a acționa. Atât pacientul, cât și kinetoterapeutul comunică verbal, non-verbal și paraverbal pentru a răspunde și a înțelege comportamentul partenerului de comunicare. Pe lângă competențele profesionale, dobândirea abilităților de comunicare de către kinetoterapeut pot conduce la adeziunea și satisfacția pacientului față de programul terapeutic.

*Scop:* În prezentul material, ne propunem să evidențiem elementele importante ale abilităților verbale, non-verbale și paraverbale ale kinetoterapeutului pentru a promova comunicarea cu pacientul în relația terapeutică. *Metode:* Analiza literaturii de specialitate a constituit metoda prezentului studiu, fiind considerate eligibile articolele cu date statistice semnificative.

Rezultate: Comunicarea verbală validează, în principal, mesajul transmis, abilitățile non-verbale confirmă și, în același timp, influențează puternic partenerii de comunicare. Prin formă, comunicarea paraverbală și non-verbală sunt concomitente verbalului, respectiv confirmându-l, însă prin conținut și interpretare, pot da alte semnificații relației.

**Cuvinte cheie**: abilități, comunicare verbală, comunicare non-verbală, comunicare paraverbală, kinetoterapie, pacient, proces terapeutic

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### 1. Introduction

Human existence is closely related to communication, how individuals interact and relate with others. By communicating, an individual gives information and interests, attitudes, values, beliefs and feelings to others, sharing with them, thus creating a network of relationships. Communication means not only speaking, writing, but also silencing, listening or acting.

Communication is an essential process in the health care system, which also includes physical therapy, medicine, social work, occupational therapy, psychotherapy, counseling, complementary therapies, and volunteering. The work of the physical therapist depends on the communication between the patient and the physiotherapist. Without effective and effecient communication, the physiotherapist will not be able to exercise his / her work (drafting, development and implementation, evaluation of individual patient individual treatment plans) at a high level of professional care quality.

Whether we talk about modern or traditional communication practices, the physical therapist sets out interactions with patients in various situations and contexts, reducing barriers to communication. The relationship of the physical therapist with the patient is based on gaining confidence in achieving the goals of the therapeutic process, but also the patient's satisfaction. Thus, there is a relationship between the patient and the physical therapist with three support stakes: communication, collaboration (co-operation) and coordination.

Besides professional skills, communication skills acquisition by physiotherapist can lead to adherence to the treatment program and patient's satisfaction. Both communicate verbally, nonverbally and paraverbally in order to respond to and understand the behavior of the communication partner.

The three forms of communication are shown separately in the presentation, but in human interactions they are interdependent, filling or shading the meanings and interpretations of the interlocutors' messages.

## 2. Methods of selection, study selection, inclusion and exclusion criteria

We reviewed the specialized literature including studies from an interdisciplinary perspective (pedagogy, sociology, psychology, espeacially). Also, studies have been synthesized in the field of physical therapy and were considered eligible only those abstracts, articles and books that showed statistically significant data.

### 3. Results

**3.1. Verbal communication.** As in any other field of activity, in kinesiotherapy verbal communication is encountered in various situations and with different manifestations. Oral communication predominates in different compositional forms and structures: the words (included in phrases addressed to the interlocutors, but also selfcontained, for example, when requesting a specific action); intervention (in situations where the audience is interested in the topic discussed, focusing on personal opinion); speech (in situations of argumentation of a problem in front of an audience): conference: debate: conversation (dialogue between two people, face to face or mediated by technology to solve a goal).

With experience, age and accumulated knowledge, the physical therapist can acquire the necessary communication skills in the therapeutic process as well as in the relationships with others in the professional and personal sector. The art of speaking is acquired through the acquisition of knowledge and continuity that eliminates uncertainty. disordered speech, lack expressiveness, balance in speech.

The verbal communication skills aim to remove some negative aspects (disordered speech, speechlessness, speech balance, emotion control, etc.) that enable effective communication between partners' communication (in our case, for example, in the physiotherapist-patient relationship).

Hyblesand Weaver, Ferreol, Flageul [quoted by 22, p. 86] identifies the success factors of verbal communication: the concision (the use of short phrases, including a single idea in a sentence); clarity (the choice of terms should be in agreement with the level of understanding of the receiver, avoiding linguistic "tics"); reliability (message to include real elements); attractiveness (using

phrases and expressionsthat are pleasant to the listener to determine the attitude and action from him); elasticity (adaptability of message to communication partners, situation and context). Simplicity, clarity and structuring are other qualities of verbal, oral and written, communication [3]. In the above, Commarmond and Exiga [2003, quoted by 22, p. 122] adds other conditions that a presentation (verbal message) must meet in order to be successful in the audience: exciting, impressive, persuasive, and actional (which proposes to put into practice).

In the kinetotherapist-patient relationship, verbal skills can encourage communication through:

- addressing respectful greetings to the patient (it is good to say the name - "Sir / Mrs X, avoiding words like" dear ", addressing by surname with "lady / sir");
- making short phrases, expressing ideas in a logical and direct way; use active verbs ("to propose," "to initiate," "to make," "to do," to "start");
- using of positive words and phrases ("sure you do" "with my pleasure" "we're at your service," "we're here for you" "we're trying to find the right solution for you");
- removal / avoiding as much as possible the use of adjectives;
- informing the patient, from the start, about the objectives of the meeting, expectations, maneuvers and techniques to be performed, working rules during recovery sessions, etc.;
- explanation of the technical terms, of the operations (working procedures, evaluation, maneuvers and working techniques) in order to avoid misunderstanding, placing the patient in uncomfortable or embarrassing situations;
- using of respectful and professional language, including nonverbal and paraverbal, show flexibility;
- using jokes with measure;
- using a technical language adapted to the level of understanding and education of the patient, age, disability (hearing, vision etc.), etc., including without the use of abbreviations;
- in the case of people with disabilities or those who do not speak the language, an interpreter may need to be present; comprehensive

- explanations and greater availability of time are necessary;
- reducing communication barriers (identifying them and solutions to diminish the results of the therapeutic process);
- using active listening;
- asking questions and clarifications to understand the patient's explanations for clarification (for example, "Did you say you have frequent fever. Does it happen once a day or more often?");
- the use of repeats, if necessary, with reference to the explanations provided;
- verifying the understanding of the message sent by story / story or questions;
- using all senses to make communication with the patient more efficient.

A number of issues related to improving the physiotherapist's speech relate to:

- length (be short) and quality: conciseness, without becoming boring;
- simplicity, with few words and well chosen;
- goal orientation (focused on a theme, a clearly expressed goal);
- the content of the message (to be prepared, choosing only the important elements according to the discourse goal;
- the elements of the structure the beginning (with an interesting story, a fact, etc.), the nucleus (professional expression as an expert on the subject, feedback from the listener, listening to the expressed feedback), the end (asking for clarification, requesting explanations);
- personal qualities honesty (if the information is not known, it is preferable to recognition against the lie), distributive attention audience responses, empathy, patience (availability to provide repetitions, details, etc.).

Roberts et. al. [28] conducted a study on the measurement of verbal communication at therapy sessions, following this type of communication, both for physical therapists and patients with pain. The results highlighted the fact that patients used verbal communication less than physiotherapists, the latter almost 50% of the hearing, those with more experience tend to interrupt patients and have concomitant conversations with them. Also, more experienced physiotherapists focused on aspects of

patient history, advices and suggestions, and less on affective components.

### 3.2. Nonverbal communication

Nonverbal language exerts much more influence on the interaction between the two partners of communication. Studies highlight the fact that 55% to 90% [Hall et al., 1990], 93% [Mehrabian, 1971, quoted 27] and 97% [Carris-Verhallen et al., 1999] of communication is nonverbal. The message transmitted becomes unbelievable in terms of inconsistency between verbal and non-verbal messages [Wadell, 2004, quote by 27].

Knowing the significance of different forms of non-verbal language, they will make it possible to interpret and use their own non-verbal language as well as to interpret the language of others. Nonverbal cues can be interpreted more easily if further reduce barriers. Gender and culture differences, in addition to other factors (education, age, past experiences, etc.), can influence their own nonverbal behavior but also the others [14, 5, 7, 9, 20, 21, 30, 31, 6, 10, 18, 19, 29].

Touch behavior, use of space, facial expressions, visual contact, body movements, gestures, posture, physical appearance, use of time, artifacts, clothes, voice tone are forms of nonverbal behavior [12, 8]. To these, observation, listening and use of silence are added [16].

On the other hand, Exline [11] divides these forms into two categories: a) *affiliated behaviors* related to intimacy, specifically feminine, including touch, proximity, smile, voice-friendly voice and visual contact; b) *dominant behaviors* related to power and influence, specific masculine, including speaking loudly, avoiding direct visual contact and trying to be influential.

Gallois et al. [13] states that the profession of physical therapist is more associated with affiliate behaviors, being more women in this field. This author also states that such nonverbal behavior ensures success in treatment.

Not everything communicated in relation to the patient is verbal communication. Much of this relationship between the patient and the physical therapist is given by what is communicated without saying a word, most of it unconsciously.

The non-verbal skills that encourage communication within the therapeutic relationship aim at:

- awareness of the percentage of nonverbal communication in the relationship with the patient during a meeting. From the expressions of the face to the frequency with which he looks at the clock, the physical therapist provides nonverbal information to the patient with whom he works;
- awareness of own nonverbal bias (for example, responses to poor patient hygiene, obese patients, nonconformist patients), and the way the patient responds to the body reaction (either by expressions of the face, either by gestures or by attitude, etc.);
- making decisions and acting according to the nonverbal clues that the patient conveys about physical and emotional signs. Often, posture, gestures (hands), face expressions provide information about the misunderstanding of verbal information delivered by physiotherapist, localization and intensity of pain, discomfort, limitations and immobilizations of various parts of the body, emotional states (anxiety, fatigue, confusion, anger, etc.) due to degradation of health.

Studies on the influence of non-verbal language in the communication between the patient and the physiotherapist concerned:

- the influence of nonverbal language (posture, facial expressions, body orientation on positive therapeutical relationship), together with other factors (interaction style, verbal factors) [24], on the efficiency of the therapeutic process [1, 23];
- nonverbal communication trends (head movements for confirmation, smile, direct contact, posture of the body - forward, touches) along with verbal communication skills in maximizing the effects of treatment [27];
- influences of the nonverbal communication skills of kinesitherapists (empathy, positive attitude, real concern for the patient, compassion, respect, etc.) on patient satisfaction [DiMatteo, 1979, Lambert et al., 1978, Carkhuff, 1973, quoted by 16];
- the relationship between the effectiveness of positive communication skills (including

nonverbal skills) and pain reduction. The biopsycho-social pain model described by Floret. al. [2004, quoted by 2] proposes a multifactorial experimental pain approach, also influenced by culture, beliefs, condition, previous painful experiences and the ability to cope with it. Biological factors can influence physiological changes, while psychological factors are reflected in the assessment and perception of internal physiological phenomena.

3.3. Paraverbal communication. Also known as voice language, paraverbal communication is a deeper level of communication and operates with aspects and forms of verbal and non-verbal communication. Encoded information is sent the prosody and vocal through elements accompanying the word and speech (characteristics of the voice, features of pronouncing, intensity, rhythm and flow of speech, intonation, pauses). It greater influence when non-verbal has communication is missing (for example, in the case of telephone conversations). The auditory channel is used in this type of communication.

Mehrabian [quoted by 22, p. 89] states that paraverbal affects 39% communication.

From the point of view of form, paraverbal communication is concomitant to verbal communication (the paraverbal encoded message corresponds to the verbally coded message), but in terms of content, paraverbal communication can give another meaning to verbally coded message.

At this level, the emphasis is mainly on: not what is said, but what it is said, not just the reception of the message and the forms of adjacent communication, but the analysis and the integration in the message itself. Thus, this form operates with nuances, being the essential factor in the personalization of communication and in the authentic perception of the message.

The following elements of paraverbal communication can be distinguished in a dialogue [17, 26]:

voice characteristics indicate primary information on those involved in the act of communication –timbre, volume, voice modulations (male / female, young / old, child / adult, hesitant / determined, energetic / exhausted, angry / merry); variations in voice

volume vary: depending on the moment of dialogue / discourse, the volume varies (at the beginning and at the end of the speech, to highlight the purpose and objectives, and the conclusions, we tend to speak louder and more enthusiastically); depending on space and ambient (outdoor / indoor, in smaller or larger rooms); depending on the size of the audience and the distance from it (we tend to speak stronger in front of a larger number of people, but also when the distance is greater than that).

- pronunciation features provide information about the homeowner's environment pronunciation and articulation of words (urban / rural, geographical area, level of training, etc.); clarity in exposure (clear, cursive, grammatical agreements) are associated with a deep knowledge of the message content, diction, and accent.
- the rhythm, the intensity, the speech flow and the use of pauses - the differentiation is based on emphasizing some ideas, preparing for the key elements of the speech (the less important and known elements are presented at a faster pace, instead the main ideas are prepared with pauses in speech and less exposed); the intensity of the speech varies depending on the time of exposure, increasing as the key elements approach.
- intonation (imperative tone, crying, excuse, struggle, surprise);
- voice tone (voice melody) it is recommended to be a normal one, but it is accepted to raise tones (to draw attention to important ideas or to calm a tense situation); usually the sharp tone produces agitation, aggressiveness and is avoided.
- stammerings, sighs and interjections.

The reason why voice tone plays such an important role is that the person who speaks the message transmits through his tone an attitude, and the receiver will respond accordingly. Moreover, the tone can radically change the sense and meaning of a message (for example, a "yes" as "no"). In the morning, when waking up, the individual can recognize his real tone of voice. As fatigue accumulates, the stamps and the height of the voice change [25].

Thus, if paraverbal can not exist as a form (always accompanying the verbal), it may alter the content of the message. Thus, the phenomenon of *over-coding* occurs.

Given its importance and the fact that it is easier to control than other communication elements, voice tones can easily be considered one of the basic elements of message transmission. However, many of us tend not to give it enough attention and use it instinctively, without integrating it into our communication strategy. The tone we use when communicating something is generally appropriate to the content of the message. It is always accompanied by the frequency with which the words are spoken - and which corresponds to the speaker's mood - or the volume of the voice.

All these aspects affect the efficiency of communication. Thus, the communication efficiency can increase or decrease, depending on the context and suitability of the message.

Mehrabian and Ferns [1967, quoted by 15] suggest that the tone of voice is significant in the therapeutic relationship between the physical therapist and the patient, the verbal message being interpreted from the point of view of tone and not of content when inconsistencies arise between them. Variations in voice tone are important in different situations (for example, in the case of a voluntary response from an unmotivated patient).

In the act of communication, some verbal expressions with no verbal content are influenced [26]:

- laughter studies reveal more types of nonverbal manifestations in the face and the whole body (real laughter - smile turned into smile, false laughter - bitter-sad, despicable, mischievous, mocking);
- moan and sigh important in context, when they occur accidentally and rarely, are natural; is unnatural when it is unconscious manifestations, discovering a state of frustration, depression, suffering to that person, which will attract its isolation;
- coughing and speech matching beyond the organic casualty (an irritated cough due to smoking or rhino-pharyngitis), there are people who clear their throat because they are tense, have a state of discomfort, worry, etc.

A number of studies on communication paraverbal revealed:

- the communicative value of silence [Cucos, 1996, Sălăvăstru, 2004, quoted by 17]in the formal educational environment (both for the student and for the teacher). The meanings of silence are multiple (confusion, approval, protest, guilt, deepness, indifference, etc.) depending on the situational context of the two interlocutors in the act of communication.
- the relationship of emotional states and paraverbal communication (in negative emotional states anger, anxiety we tend to make mistakes of speech, extension of the last syllables of words, the use of interjections before, during or at the end of the message) [Kasl and Mahl, 1965, quoted by 22].
- classification of the expressions of laughter after the involuntary articulated dominant vocal [Birkenbihl, quoted by 26] "a" expressing excitement, joy, being contagious, "e" expressing a certain malignity and distancing, "i" expressing naivety and restraint exteriorization, "o" expresses surprise, but it can also have a meaning of no confidence, "u" less rarely expressed, it expresses sarcasm.

Paraverbal skills development refers to: continuously adjusting voice volume, improving diction (clarity, precision), breath control speech, voice modulation and continuous adjustment of the rate of speech, use of pauses, placing emphasis, the sighs, interjections, etc. [26].

### Conclusion

In conclusion, if verbal communication mainly validates the message, non-verbal skills confirm and, at the same time, strongly influence communication partners. By form, paraverbal and non-verbal communication are concomitant with the verbal, respectively confirming it, but by content and interpretation, they can give other meanings to the relationship.

### References

- 1. Ambady N., Koo J., Rosenthal R., Winograd C. (2002). *Physical Therapistst*, *Nonverbal Communication Predicts Geriatric Patientst*, *Health Outcomes*, Psychology and Aging, 17(3), 443-452.
- Amoudi M., Anabtawi R., Bzoor A., Keelan, S., Abu Hassan, W. (2017). The effectiveness of positive communication skills in reducing pain during physiotherapy session: A Quantitative

- result from questionnaire surveys of Palestinian orthopaedic patients, Universal Journal of Public Health, 5(1), 17-24.
- Burnard P. (2001). Effective Communication. Skills for Health Professionals, Nelson Thornes Ltd.
- Carris-Verhallen W., Kerkstra A., Bensing J.M. (1999). Nonverbal behavior in nurse-elderly patient communication, Adv. Nurs., 29, 808-818.
- Coats E.J., Feldman R.S. (1996). Gender differences in nonverbal correlates of social status, Personality and Social Psychology Bulletin, 22, 1014-1022.
- Collet P. (1993, 2012). Cartea gesturilor europene, ed. Trei, Bucuresti.
- Dindia K., Cannary D.J. (2006). Sex differences and similarities in communication, Mahwah, Lawrence Associates.
- 8. Duncan S. (1969). *Non-verbal communication*, Psychological Bulletin, 72 (2), 118-137.
- Eagly A.H., Crowley M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature, Psychological Bulletin, 100, 283-308.
- Ekman P., Friesen W.V. (1975). Universals and cultural differences in facial expressions of emotion, în Cole J. (editor). Nebraska symposium on motivation, 1971 (vol. XIX, p. 207-282), Lincoln, University of Nebraska Press.
- Exline R.W. (1971). Visual Interaction The Glances of Power and Preference, in S Weitz (editori)(1974). Non-Verbal Communication, Oxford University Press, New York
- Floyd K. (2013). Comunicarea interpersonală, ed. Polirom, Iasi
- 13. Gallois C., Bent A., Best M., Dwyer, J., Fitch, S., Jack, M., Kalman R. (1979). *Non-verbal behaviour in same-sex and mixed-sex physiotherapist-patient interactions*, Australian Journal of Physiotherapy, 25, 5-9.
- Hall E.T., Hall M.R. (1990). Understanding cultural differences: German, French, and Americans, Yarmouth, Intercultural.
- Hall T., Lloyd C. (1990). Non-verbal communication in a health care setting, British Journal of Occupational Therapy, 53, 383-387.
- Hargreaves S. (1982). The relevance of non-verbal skills in physiotherapy, The Australian Journal of Physiotherapy, 28, (4), 19-22.
- Iacob L. (2009). Comunicare didactică, în Cucoş, C. (coord.),
  Psihopedagogie pentru examenele de defitinivare şi grade didactice, ediția a III-a, Ed. Polirom, Iași, 391-416.
- Matsumoto D. (1991, 2006). Cultural influences on facial expression of emotion, Southern Communication Journal, 56, 128-137.
- 19. McAndrew F.T. (1986). *A cross-cultural study of recognition thresholds for facial expression of emotion*, Journal of cross-Cultural Psychology, 17, 211-224.
- 20. Moore M.M. (1985). Non-verbal courtship patterns in women: context and consequences, Ethology and Sociobiology, 6, 237-247.
- 21. Patterson M.L., Schaeffer R.E. (1997). Effects of size and sex composition on interaction distance, participation, and

- satisfaction in small groups, Small Group Behavior, 8, 433-442
- 22. Pânișoară I.O. (2004, 2008). Comunicarea eficientă. Metode de interacțiune educațională, ed. Polirom, Iași.
- 23. Perry J.F. (1975). *Nonverbal communication during physical therapy*, Physical Therapy, 55 (6), 593-600.
- Pinto R.Z., Ferreira M.L., Oliveira V.C., Franco M.R., Adams R., Maher C., Ferreira P.H. (2012). Patient-centred communication is associated with positive therapeutic alliance: a systematic review, Journal of Physiotherapy, 58, 77-87.
- Popovici I.M. (2015). Elemente de psihopedagogie cu aplicații în educație fizică și sport, Ed. Universității "Alexandru Ioan Cuza" Iași.
- Prutianu Ş. (2004). Antrenamentul abilităților de comunicare, ed. Polirom, Iași.
- Roberts L., Bucksey S. J. (2007). Communicationg with Patients: What Happens in Practice?, Physical Therapy, 87 (5), 586-594.
- Roberts L., Whittle C.T., Cleland J., Wald M. (2013). *Measuring Verbal Communication in Initial Physical Therapy Encounters*, Phys. Ther., 93 (4), 479-491.
- Rosenthal R. (editor) (1979). Skill in nonverbal communication: Individual differences, Cambridge, Oelgeschlager, Gunn&Hain.
- Spain D. (1992). Gendered spaces. Chapel Hill, University of North Carolina Press.
- 31. Wood J.T. (2009). Gendered lives: Communication, culture, and gender (ed. a VIII-a), Belmont, Cengage/Wadsworth.