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REVIEW ARTICLE

The importance of nonverbal communication in clinical medicine: A review

Klinik tıpta nonverbal iletişimin önemi: Derleme

Ilyas KAYA[1], Murat YUCEL[2], Eyup CETIN[3]

[1]Samsun Provincial Directorate of National Education, Social Studies Teacher, Samsun, Türkiye
[2]Sivas Numune Hospital, Neurosurgery Department, Sivas, Türkiye
[3]University of Health Sciences Haydarpaşa Numune Training and Research Hospital, Neurosurgery Department, İstanbul, Türkiye

Abstract

People's feelings and thoughts become visible through their gestures and facial expressions. This visibility is called body language. Analysis and evaluation of body language by experts can provide important information about a person's state of mind. Clinically, the communication that emerges as a result of these studies is called nonverbal communication. People's facial expressions, gestures, tone of voice, speed of speech, and even their distance from people or situations constitute the main elements of nonverbal communication. The conceptual framework of this compilation, based on nonverbal communication, is formed by Kaya's (2019) work titled "I Didn't Say It, My Body Did." The working context of the compilation consists of academic studies that use nonverbal approaches in communication in a clinical sense. When selecting academic studies, importance was given to those that used nonverbal elements such as facial expressions, gaze, and posture, which are the main elements of communication, as the main elements of the content. The basic findings presented in the compiled studies and clinical inferences were examined, common themes were identified, and findings and conclusions were presented based on these themes. The purpose of this compilation is to reveal the application areas of nonverbal communication at different stages of healthcare services. It aims to highlight the importance of nonverbal approaches for healthcare professionals and individuals benefiting from healthcare services, both in diagnosis and in the analysis of patients. Furthermore, it discusses how it can support the reduction of risks associated with communication errors at different stages of healthcare services.

Keywords: Body language, nonverbal communication, communication in healthcare, healthcare worker.

Özet

İnsanların duygu ve düşünceleri, jest ve mimikleriyle görünür hale gelmektedir. Bu görünür hale beden dili denilmektedir. Beden dilinin uzmanlar tarafından analiz edilmesi, değerlendirilmesi ile kişinin ruh hali hakkında önemli bilgiler elde edebilmektedir. Klinik anlamda bu çalışmalar sonucunda ortaya çıkan iletişime de nonverbal iletişim denilmektedir. İnsanların yüz ifadeleri, jestleri, ses tonları, konuşma hızları, hatta insanlara ya da durumlara olan mesafeleri nonverbal iletişimin ana öğelerini oluşturmaktadır. Nonverbal iletişimden yola çıkarak ortaya konan bu derlemenin kavramsal çerçevesini Kaya (2019)' nın yılında yazmış olduğu "Ben Demedim Bedenim Dedi" adlı eseri oluşturmaktadır. Derlemenin çalışma bağlamanı ise klinik anlamda iletişimde nonverbal yaklaşımlar içerik olarak kullanan akademik çalışmalar oluşturmaktadır. Akademik çalışmalar seçilirken iletişimin ana unsurları olan mimik, bakışlar, duruş gibi nonverbal unsurları içeriğin ana unsuru olarak kullanılmış olmasına önem verildi. Derlenen çalışmalar da ortaya konulan temel bulgular, klinik çıkarımlar incelendi ortak temalar bulunarak bu temalardan bulgular ve sonuçlar ortaya konuldu. Bu derlemenin amacı nonverbal iletişimin, sağlık hizmetlerinin farklı basamaklarında uygulama alanlarını ortaya koymak. Sağlık çalışanları ile sağlık hizmetlerinden faydalanan kişilerin gerek teşhis koyarken gerekse hastaların analiz edilmesi konusunda nonverbal yaklaşımların önemini ortaya koymaktır. Bununla birlikte olmak üzere sağlık hizmetlerinin farklı aşamalarında iletişim hatalarıyla ilişkili riskleri azaltmayı nasıl destekleyebileceğini tartışmaktır.

Anahtar Kelimeler: Beden dili, sözsüz iletişim, sağlık hizmetlerinde iletişim, sağlık çalışanı.

INTRODUCTION

The physician approach to error in healthcare settings is not a situation that is presented in the shallowness of simply asking questions and making decisions based on the answers obtained. It is well known that the emotional indicators and effects of what people say are more important than what they say and contain more qualitative information. Despite this, interestingly, the data from body language is ignored and only verbal expressions are relied upon. This means overlooking a very important element of communication, namely the transmission of emotions. In communication, the impact of verbal communication on the other party is only around 7%. Meaningful and high-quality interpretations cannot be made from a data source with such a low impact. However, gestures and facial expressions (nonverbal elements), which are the main components

Corresponding Author: Ilyas KAYA ilyaskaya0@gmail.com
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of body language and are accepted in the literature as having an impact rate of around 55% in communication, form the "visible" and "audible" layer of emotion and the actual situation to be expressed in the patient-physician approach (1).

Regardless of how effective body language is as a means of conveying emotion, relying solely on body language signals to reach definitive conclusions about a person's mood and emotional state is a flawed approach. It is also not a scientifically sound method. Therefore, the correct approach should be to consider body language elements as a complementary area of observation that provides very important clues in evaluating the patient in doctor-patient interactions, supporting the healthcare professional in reducing the risks that arise when analyzing the patient, both when making a diagnosis and when making comments about the patient (2).

Discussions between healthcare professionals and patients are conducted through a combination of verbal and nonverbal communication methods. This combination provides feedback to the doctor about the patient's emotional responses, such as anxiety, withdrawal, defensiveness, uncertainty, and trust; this feedback enables meaningful and effective communication with the patient, particularly regarding the course of the disease, approaches to improving the patient's quality of life, and discussions about the disease and treatment process.

Another important point is that it ensures the establishment of an emotional bond between the patient and the healthcare professional. This is crucial because if the patient forms a genuine emotional bond with the healthcare professional, they will be more open about sharing information regarding their overall condition. This situation will strengthen clinical collaboration and contribute to the implementation of an effective treatment process (3).

This review focuses on the effectiveness of nonverbal communication in supporting communication between patients and healthcare personnel, and how this relates to issues such as information gathering and patient analysis.

The aim of this review is to establish a framework for a more effective and efficient approach to increasing the impact of nonverbal communication skills on key elements of clinical assessments, such as context, pattern, and verification.

Conceptual Framework

The conceptual framework of this article consists of nonverbal communication, mind-body interaction and psychophysiological foundations, social cognitive function in clinical interviews, and the interpretation of problems arising from masking behaviors.

1) Definition and Components Of Nonverbal Communication

Our body has a complex structure consisting of various systems. One of these systems is the nervous system. One of the important tasks of the nervous system is to ensure that emotions arise and are controlled. The brain's processes of creating and evaluating emotions work in a two-way manner. That is, the cortical networks called the limbic system both generate emotions and ensure that the person is aware of the emotion that has been generated (4).

Paul Ekman and Wallace Friesen demonstrated that body language has a universal structure by coding the observable movements of facial muscles; they also determined that facial muscle movements, when interpreted within their context, can provide supportive clues about an individual's emotional expressions (5).

From this perspective, it is considered that nonverbal cues, when evaluated with careful observation, can serve as a meaningful complementary element to the information and relationship components between patients and healthcare personnel.

2) Mind–Body Interaction and Psychophysiological Basis

Electrical responses generated from the limbic system in less than one-fifth of a second activate the body's muscles. These activated muscles make emotions visible. The emotional impact produces visible effects not only in the muscles but also in the tone of voice, posture, and respiratory systems. When professional eyes evaluate these movements systematically, important

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clues about the patient can be obtained, especially in clinical practice (5).

3) Social Cognitive Function in Clinical Interviews

When properly evaluated, these conscious observations enable the generation of very important hypotheses about both the accuracy of the patient's verbal expressions and their nonverbal emotional state. Nonverbal communication has a reciprocal nature. While analyzing the patient, the physician can also reflect their own emotions onto the patient, thereby creating different emotional environments.

4) Masking and The Clinical Interpretation of Incongruities

One of the important mechanisms of nonverbal communication is "lying." Lying can sometimes be related to what is said, but it can also be related to changing one's attitude. People can lie verbally about a subject, but what is more significant is hiding their true feelings. This is also called masking. Masks are a method consciously created by the brain to enable people to exist in society. However, careful clinical observation can help identify nonverbal cues that indicate emotional dysregulation.

In clinical interviews, when the patient's real feelings, which they try to hide, are revealed through good observation, meaningful communication can be established between the patient and the healthcare professional, and the correct intervention method can be selected (4).

SCOPE AND METHOD

This study is designed as a thematic narrative review of the literature on nonverbal communication in clinical medicine. The conceptual framework and terminological basis of the review are shaped around Ilyas KAYA's published work, the book titled "I Didn't Say It, My Body Did," which addresses communication and nonverbal communication processes.

This study was conducted using a thematic review approach to examine the literature on nonverbal communication in clinical medicine. The systematic review process was carried out as follows.

First, studies published between 1990 and 2025 were searched in databases such as PubMed, Google Scholar, TR Index, and the YÖK National Thesis Center using specific keywords. Studies addressing the fundamental elements of nonverbal communication—such as body language, facial expressions, eye contact, and posture—and examining patient-physician interactions in a clinical context were included as selection criteria. Studies deemed invalid or irrelevant were excluded from the review based on their methodological quality.

In the second phase, the selected studies were systematically reviewed, and each study was classified using a thematic analysis method. During this process, the key concepts of each study were identified, and significant clinical implications were grouped accordingly. Thirdly, the findings from the analyzed studies were thematically synthesized, and each theme was linked to clinically evaluated outcomes.

Finally, the findings were addressed from a clinical practice perspective, and their potential impacts on clinical processes as well as possible areas of application were discussed.

The concrete infrastructure is provided by Satı Demir Ünal's doctoral thesis, which examines the effect of training aimed at developing communication and assistance skills on patient-healthcare worker behaviors; Nurdan Gürkan's thesis, which uses a scale-based approach to examine effective listening and body language assessment levels in nurses; and Fahmin Hagverdiyev's thesis, which compares the performance of recognizing emotions appearing in facial muscles in terms of personality formation level (borderline and neurotic) in terms of facial muscle emotion recognition performance, Professor Jill Thistlethwaite's educational text focusing on recognizing emotional cues and discussing the course of illness in patient-doctor interactions specifically in family medicine, the findings of the study by Zarotti, N., and colleagues on emotion recognition in Huntington's disease, and the qualitative research conducted jointly by Miller EM, Porter JE, and Barbagallo MS examining the impact of language on improving patient quality of life in healthcare settings.

During the search process, both Turkish and English keywords were used; nonverbal communication,

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bodylanguage, clinical communication, patient-physician communication, emotion recognition, health communication, nonverbal communication, body language, "clinical communication, doctor-patient communication, and emotion recognition, as well as various combinations of these terms.

No specific time period was imposed for this compilation; however, priority was given to current studies that are directly related to the topic, accessible, and consistent with the study's objective.

In this review, academic studies published between 1990 and 2025 that address nonverbal communication elements (facial expressions, eye contact, posture, etc.) in the context of clinical communication were systematically selected. The selected studies were evaluated based on their clinical significance and methodological validity.

The following methods were used in the examination and evaluation of the above sources that form the concrete infrastructure:

(a) What the research design and framework of the study were, (b) the data collection method and sample, (c) which nonverbal elements were examined in the research and revealed the main perspective, (d) the main findings and conclusions of the research, and (e) what the limitations of the research were, regardless of how comprehensive it was.

The findings obtained from the sources were synthesized and combined around common themes, prioritizing clinical significance. These themes are:

(a) elements of nonverbal communication and their impact revealed in patient analysis during clinical interviews, (b) results of communication skills training received by healthcare professionals, (c) language skills revealed for improving patient quality of life, (d) emotion recognition and risk identification. Each theme has been discussed separately in this review study in terms of both its methodological strengths and limitations. Studies that are not directly related to healthcare services and do not link nonverbal communication to clinical practice have been excluded from the scope of this study.

Thematic Frameworks of The Included Studies

1) In the study titled "The Effect of Helping Skills Training on the Communication Skills of Nurses Working with Oncology Patients," the nonverbal communication concepts used were examined, and it was determined that concepts such as communication skills, helping skills training, and empathy were used. The study used a pre-test-post-test design from pre-experimental research models as its method. Scale observation forms were used as the data collection method, and these were analyzed using the t-test, Mann-Whitney U, Wilcoxon, Kruskal-Wallis, and Pearson correlation tests in the SPSS program. A comparison of the pre-test and post-test of the skills training was performed. The main axis of this study was determined as the "results of communication skills training received by healthcare workers." The theme obtained from the study is "the development of communication skills through training." The findings obtained from the study reveal that communication skills are not limited to those acquired through personal experience but can also be developed through certain training programs (6).

2) In the study titled "Investigation of Nurses' Effective Listening and Body Language Assessment Skills," the nonverbal communication concepts used were examined, and it was determined that concepts such as effective listening, body language assessment, communication competence, and clinical interaction quality were used. A survey was used as the quantitative research method in the study. A sample of 136 nurses was selected for the study. The survey data were analyzed using the SPSS 17.0 program. Mann Whitney U and Kruskal Wallis Analysis were used. The main axis of this study was determined as the area of investigation under the title "the level of competence and possible risks of communication skills used in patient-healthcare worker interaction." The theme identified from the study was "the power of language in improving the patient's quality of life." The study emphasized the importance of the effect of language and nonverbal language used during communication on the quality of the bond established with the patient and the effects of knowing body language cues on active listening (7).

3) In the thesis titled "Examination of Facial Emotion Recognition Ability and Factors Affecting Facial

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Emotion Recognition Ability in Individuals with Neurotic Personality Organization and Individuals with Borderline Personality Organization," the nonverbal communication used was examined, It was determined that concepts such as emotion recognition, facial analysis, individual differences, and social perception were used. The study employed clinical interviews (SCID PD) and the analysis of structured tests such as KOREN, SBT, and BKE as its methodology. The main axis of this study was determined as the field of investigation under the heading "the existence of the effect of personality organization level on emotion recognition." The theme obtained from the study was determined as "the risk of misinterpretation in the evaluation of nonverbal data." The study determined that the facial emotion recognition skills of individuals with relevant personality organizations vary according to many factors and cause misinterpretations (8).

4) Patient-Doctor Interactions: The article titled "Emotional Cues and Discussion of Prognosis" examined the concepts of nonverbal communication used, determining that concepts such as emotional cues, deepening communication, and communication management were employed. The focus interview method was used as the research method. The main axis of this study was determined as the field of examination under the heading "communication experiences in topics such as analyzing the course of the disease and clinical outcomes." The theme obtained from the study was determined as "the power of language presented to improve the patient's quality of life." The most important finding of the study is that language skills and nonverbal communication approaches contribute positively to the analysis of the course of the disease from the perspective of both the physician and the patient, and that it is necessary to analyze the emotions of the other party and structure the narrative in difficult conversations (9).

5) The Effects of Service Environment and Language in Palliative Care: A Qualitative Exploratory Study of Nurses' Perspectives in Victoria examined the concepts of nonverbal communication and determined that concepts such as privacy, noise, spatial arrangement, and environment were used. The interview method was used as the research method. Interviews were conducted with nurses selected using snowball sampling, and thematic analysis was used to analyze the interviews. The main focus of this study has been determined as the area of investigation under the heading "Communication is directly proportional to the environment provided in addition to personal skills." The theme obtained from the study has been determined as "The defining characteristics of environment and language in clinical communication and palliative care." Communication is effective in strengthening the bond between patients and healthcare personnel, but the strength of this effect is determined by the environment provided (10).

6) Emotion recognition in individuals with Huntington's disease: A comprehensive systematic review examined the concepts of nonverbal communication and determined that concepts such as emotion recognition and interaction were used. The systematic review method was used as the methodology in the study. Studies found in the MEDLINE, PsycINFO, Academic Search Complete, and CINAHL databases between 1993 and 2025 were compiled and synthesized. The main focus of this study was determined to be the area of investigation under the heading "the importance of emotion recognition skills and scope." The theme identified from the study was "certain neurological problems causing misinterpretation of body language." Correct interpretation of body language is linked to the proper functioning of mental processes. Mental problems cause certain issues in body language analysis, such as misinterpretation and incorrect assessment (11).

Table 1 summary of the methodological characteristics of the studies reviewed and the themes summarized

Notes: The abbreviations reflect the original names of the measurement instruments used in the studies. For instruments developed in Turkey or whose validity has been confirmed, both the original Turkish abbreviations and their English academic equivalents are provided in parentheses to ensure terminological consistency and facilitate citation.

Abbreviations: KOREN: Kişilik Organizasyonları Envanteri, SCID-5-PD: DSM-5 Kişilik Bozuklukları için Yapılandırılmış Klinik Görüşme, SBT: Savunma Biçimleri Testi, BKE: Borderline Kişilik Envanteri, DSM: The Diagnostic and Statistical Manual of Mental Disorders

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Table 1. Research areas of included studies and emerging themes

No	Name of the Study	Concepts of nonverbal communication	Method used	Research Focus
1	Ünal (2005)	Communication skills, helping skills training, empathy	Pre-test-post-test design in a single group	Results of communication skills training received by healthcare workers
2	Gürkan (2011)	Effective listening, body language assessment, communication competence, clinical interaction quality	Survey study as a quantitative research method	Competency level and potential risks of communication skills used in patient-healthcare worker interactions
3	Hakverdiyev (2022)	Emotion recognition, facial analysis, individual differences, social perception	Analysis of clinical interviews (SCID-5- PD) and structured tests such as KOREN, SBT, BKE	The existence of the effect of personality organization level on emotion recognition
4	Thistlethwaite (2009)	Communication experiences in areas such as emotional cues, deepening communication, communication management	Focused interview method	Analysis of disease progression and clinical outcomes
5	Miller et al. (2023)	Privacy, noise, spatial arrangement, environment	Interview method; Snowball sampling method, thematic analysis approach	Communication is directly proportional to the environment provided, in addition to individual skills
6	Zarotti et al. (2026)	Emotion recognition, interaction	Systematic review method	The importance of emotion recognition skills and scope

RESULTS

Healthcare personnel who received training in communication skills and assistance skills were found to establish stronger therapeutic rapport with patients, whereas healthcare personnel who did not receive such training exhibited a limited ability to interpret patient's emotional states (7). The proficiency level of communication skills used in patient-healthcare worker interactions was found to be of vital importance. However, it has been observed that the terminology used between patients and healthcare professionals can lead to clinical misinterpretations (8).

When evaluating the study titled "Examining emotion recognition skills and factors affecting emotion recognition skills in individuals with neurotic personality organization and individuals with borderline personality organization," the risk of misinterpretation in the evaluation of nonverbal cues was identified as a primary theme. It was noted that this risk is significantly associated with the presence of healthy mental processes. (8) When evaluating the study titled "Patient-doctor interactions, emotional cues, and discussion of prognosis," the communicative competence presented to improve the patient's quality of life was identified as a theme. Communication experience was determined to be a critical factor. Communication appears to be one of the key elements in strengthening the relationship between the patient and the healthcare professional (9). The effect of the environment on establishing and maintaining high-quality clinical communication should not be overlooked. It plays an effective role in strengthening the emotional bond.

Recognizing emotions enables effective communication and is contingent upon the presence of healthy mental processes. Neurological impairments can cause misinterpretations in perceiving emotions, thus preventing appropriate behavior responses, and these two situations lead to communication breakdowns.

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DISCUSSION

This study first discusses the misconception that body language has a broad scope of influence, noting that using it as the sole criterion for understanding a person's general emotional state can lead to errors. The elevation of body language to the status of reading intentions about people has also been a topic of debate. From this perspective, it has been stated that the impact of body language is around 55% in the literature, and that meaningful interpretations about a person's emotional state can be made when the remaining parts are evaluated together with other supporting elements (environment, verbal expressions, privacy, etc.) (2).

The interpretation of body language is considered more of a complementary element of patient-physician communication that supports clinical reasoning, rather than a structure that leads to diagnosis when evaluated together with other nonverbal cues.

It has been argued that identifying patients' emotional states based on body language analysis can be difficult in some cases and that emotions may even be misinterpreted. It has been argued that analyzing only the body language between the patient and physician is insufficient for ensuring high-quality nonverbal communication; it is considered that the environment supporting communication quality is also effective in emotion recognition.

CONCLUSION

When the studies included in the compilation were evaluated, the following results emerged. In clinical interviews, it was found that nonverbal communication skills are extremely important in establishing an emotional bond between the patient and the healthcare professional. Thereby contributing to outcomes such as the disease process, clinical communication with the patient, success in gathering information, and strengthening the sense of trust between the patient and the physician.

It has been revealed that training in communication and assistance skills is effective in establishing an emotional bond between the patient and healthcare worker, and that healthcare personnel who have not received this training may make mistakes in assessing patients. In addition, it has been revealed that some diseases (neurological-psychiatric) are insufficient in identifying emotions, and it has been observed that individuals misinterpret nonverbal cues in particular. This situation has been determined to be a significant risk in clinical interviews.

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