Proceedings of Scientific Research Universidad Anáhuac, 2021, 1(1): 52-61.
ISSN: in process.

Review Article

Social intelligence, an elementary competence in the development of the doctor-patient relationship

David Cerdio Dominguez[a1]*, Paulina Millán Zurita[a2], Alma Cristina Cedillo Urbina[a3], José Marcos Félix Castro[a4], Elvia Cristina Del Campo Turcios[a5]

[a]Facultad de Ciencias de la Salud, Universidad Anáhuac México Campus Norte, Huixquilucan, Estado de México, México.

ID ORCID:
[1]https://orcid.org/0000-0002-9871-1649, [2]https://orcid.org/0000-0002-1222-2394, [3]https://orcid.org/0000-0002-0255-3157, [4]https://orcid.org/0000-0002-1288-1533, [5]https://orcid.org/0000-0002-6265-9789

https://doi.org/10.36105/psrua.2021v1n1.07

ABSTRACT

Introduction: The doctor-patient relationship is one of the great foundations of the vocation of medicine in the service of humanity. There can be no professional care without a solid foundation centered on trust and assertive communication. It is only then that competences such as Social Intelligence (SI) can play a defining role since they provide the physician with the practical skills, theoretical knowledge, and relevant attitudes to establish a professional relationship with the patient. Daniel Goleman presents the concept of SI as a continuation of his work on EI, where the whole cognitive process arises from self-knowledge, the ability to delve into the different spheres of the emotional-affective spectrum and self-regulation. Later, the social relationship is reached when the emotional recognition of others is based on the individual capacity for empathy which, together with a harmonized regulation, leads to the development of healthy social skills. **Objective:** To present the relevance of SI competence in the proper development of the doctor-patient relationship. **Methods:** A systematic review was carried out based on the PRISMA™ statement (2009), using PubMed™, Medigraphic™, and Researchgate™ as search engines. A total of 115 articles were evaluated. Results: Based on its diverse definitions, accepted since 1920, social intelligence is an essential component. However, it is clear that there is a huge contradiction because it is not really considered in formal education. Over the years, the concept of SI has evolved, while the doctor-patient relationship has become increasingly important. **Conclusion:** The general consensus is that the need to humanize the medical sciences leads us to reflect on the scarcely studied humanistic competences. Then, we can promote a comprehensive medical education to promote a holistic conception of health as those who suggest medicine is a vocation do.

Key words: social intelligence; patient-doctor; anthropocentrism; human dignity; emotional intelligence; communication; humanism.

* *Corresponding Author:* David Cerdio Dominguez. Facultad de Ciencias de la Salud. Universidad Anáhuac México. Address: Av. Universidad Anáhuac 46, Lomas Anáhuac, 52786. Huixquilucan, Estado de México, México. Tel: 56270210, ext. 8847. E-mail: david.cerdio@anahuac.mx

Received: 4 November 2020.
Accepted: 29 January 2021.

RESUMEN

Introducción: La relación médico-paciente es uno de los fundamentos de la vocación médica al servicio de la humanidad. No puede haber atención profesional sin una base sólida centrada en la confianza y la comunicación asertiva. Las competencias blandas como la Inteligencia Social (IS) juegan un papel determinante ya que dotan al médico de las habilidades prácticas, conocimientos y actitudes relevantes para establecer una relación profesional con el paciente. Goleman presenta el concepto de IS como continuación de su trabajo sobre la IE, donde todo el proceso cognitivo surge del autoconocimiento, la capacidad de ahondar en las diferentes esferas del espectro emocional-afectivo y del autoconocimiento. Posteriormente se llega a la relación social, donde el reconocimiento emocional de los demás se fundamenta en la capacidad de empatizar que, junto con una regulación armonizada, conduce al desarrollo de habilidades sociales. **Objetivos:** Presentar la relevancia de la IS en el desarrollo adecuado de la relación médico-paciente. **Metodología:** Se llevó a cabo una revisión sistemática basada en la Declaración PRISMA™ 2009, utilizando PubMed™, Medigraphic™ y Researchgate™ como motores de búsqueda. Un total de 115 artículos fueron evaluados. **Resultados:** Con base en la diversidad de definiciones aceptadas desde 1920, la Inteligencia Social es un componente esencial en la educación y práctica médica; sin embargo, evidentemente existe una enorme contradicción porque no se tiene realmente en cuenta en la educación formal. Con el paso de los años, el concepto de inteligencia social ha evolucionado y, en el caso de la relación médico-paciente, es cada vez más importante. **Conclusión:** El consenso generalizado de la necesidad de humanizar las ciencias médicas nos lleva a reflexionar sobre las competencias humanísticas poco estudiadas. Así, se promoverá la educación médica integral en beneficio de una concepción holística de la salud de manera similar a la propuesta por los defensores de la medicina como una vocación.

Palabras clave: inteligencia social; médico-paciente; antropocentrismo; dignidad humana; inteligencia emocional; comunicación; humanismo.

1. INTRODUCTION

1.1 Social intelligence

1.1.1 Social intelligence and its evolution

To understand social intelligence (SI) it is important firstly to set a comprehensive background of the definition and structure of intelligence, a concept which is constantly changing and progressing. In the 1920s, Thorndike proposed to divide intelligence into three dimensions: abstract, mechanical, and social; this set of dimensions would help the human being to understand and handle ideas, objects, and people.[1-4] Seven years later, Spearman Thurstone established a monolithic theory of human intelligence, contemplating seven factors, which he considered mental capacities, without addressing the concept of social intelligence specifically.[5-14] In 1933, Vernon defined social intelligence as the human ability to interact with other people and thus get along with them. In 1938, Welchester approved Spearman's ideologies, which stated that SI is considered to be general intelligence, but he went further and established that it is a form of intelligence applied directly to social situations[15-21] and discarded the notion of it only being a component of intelligence.[22-26] Thirty years later, Guilford brought up the Structure of Intellect, where intelligence is composed of operations, content, and products. which rise to 120 specific intellectual abilities, in possible combinations of 5 operations, 4 contents and 6 products.[27] In turn, Guilford considered SI was directly linked to behavioral contents as well as the interactions between individuals. The latter fundamentally take into account the attitudes, needs, desires, moods, perceptions, and thoughts of the human being to help generate empathy towards others.[28] Finally, in 1983, Dr. Gardner proposed the theory of multiple intelligences in which interpersonal intelligence, the basis and fundament of SI was found, defining it as that which is related in understanding and acting. In it, different moods, temperaments, motivations, and intentions, expressed both through verbal and non-verbal means, can be observed.[29]

1.2 Social intelligence in the theory of multiple intelligences

At the end of the past century, Howard Gardner presented the theory of multiple intelligences, offering a broad, individualized, and contradictory vision to the socio-educational paradigm of the time.[30] He emphasized that, in terms of its nature, the human being shows intellectual qualities in different areas of knowledge, music, linguistics, logic-mathematics, vision-space, kinesthesis, nature, and even those that are intrapersonal and interpersonal. He focused on a pedagogical approach and a comprehensive humanistic vision.[31-33] This theory proposed a novel educational standpoint, where human development goes far beyond mere academic-school training.[34] It gave rise to a perspective centered on the person as a determining pillar in the process of social construction.[35-40]

Even though the development of sympathetic social skills is sequenced and to a certain extent natural, it should not be forgotten that based on the approach made by Gardner[41], intrapersonal and interpersonal intelligence can, and should be, fostered in students to achieve a person's comprehensive development.[42-48]

1.2.1 Intrapersonal intelligence

The individual's ability to recognize in themselves the distinct emotional, affective, and intellectual spheres is what Dr. Gardner[48-50] identifies as intrapersonal intelligence. It arises from the cognitive process of introspection and self-regulation of what is commonly known as emotional intelligence (EI).

1.2.2 Interpersonal intelligence

To acknowledge the importance of SI founded through interpersonal intelligence, it is important to analyze the very nature of human being. Humans are gregarious, which derives in the importance of social skills emerging from inner interaction. Interpersonal intelligence allows us to socialize harmoniously.[51-52]

From the development of these two kinds of intelligence, we acquire humanistic competences, such as EI and SI. We also get the ability to acknowledge one's emotions, regulate them, and finally act in consequence, developing a harmonious social construction.

1.3 Emotional intelligence

EI is defined as the ability to perceive and identify the emotions, both in others and ourselves to discriminate between them and use the information to guide thought and act accordingly.[53] Nowadays, emotional intelligence is one of the most promoted competences; however, it has not really been developed. It is essential to delve into the composition of the emotional core itself to understand and study the construction and structure of EI in a timely manner.

1.4 Social Intelligence

Anthropologically, the human being is social by nature, a quality that consequently arises from the individual recognition of the different stimuli that allow us to live harmoniously in society.[54] This ability arises from the sequenced development of intrapersonal intelligence that later triggers interpersonal skills called SI.[55] Studies carried out by Daniel Goleman[55] show that SI originates in the structural foundation of mirror neurons, in charge of the empathic and sympathetic responses generated in the process of natural-social coexistence. Therefore, it is a developable competence based on a biological argument.[56] The sequenced understanding between EI and SI reflects on the different spheres that make up the emotional-affective spectrum.[57]

1.5 Doctor-patient relationship

1.5.1 Importance of doctor-patient relationship

The doctor-patient relationship is the foundation of the medical profession. In his speech "Medical Ethics" Laín Entralgo, a Spanish anthropologist and physician[58], stresses the importance of focusing professional attention on personalistic criteria (Elio Sgreccia). Then, the person's dignity is promoted as a fundamental criterion of the medical vocation.[59] So, in the twenty-first century, it is basic to promote concrete ways that will allow the health professional to acquire the theoretical-practical skills (competences) to promote an assertive communication with their patients.[60] Old models, such as paternalism, must be put aside so that medical education can generate a paradigmatic shift.

1.5.2 Social intelligence and doctor-patient relationship

In recent years, medical education has solely focused on technical-scientific aspects.[60] It seems that "The Person", who in reality is this teleological foundation and central aspect of the medical vocation, has been left aside.[60] Achieving the education of clinical competencies in line with humanistic competences centered on personalism is perhaps one of the greatest challenges of the twenty-first century.[61] This constant depersonalization detracts from the doctor-patient communication[62] and consequently generates a greater need to live attached to the most innovative techniques for diagnosis and treatment. Not understanding oneself individually, and consequently not understanding others, is a major obstacle in achieving a medical vocation.[63] It would be of great interest to evaluate the actual state of SI in medical practice since there is a great lack of research in this sense. However, the generalized opinion agrees on an urgent need to humanize medicine.[63]

The situation and the globalized context in the face of the COVID-19 pandemic have made us reflect on the importance of focusing our attention on the humanistic and scientific competences that can strengthen this anthropological need.[64] The COVID-19 pandemic has revealed a crucial aspect of the doctor-patient relationship. Without a doubt, it is one of the practical aspects that have been most affected by the current epidemiological situation. Patients have had to fight for their life away from their relatives, accompanied only by

their doctors. That is the fundamental importance, to retake humanistic aspects that promote comprehensive training for the benefit of patients and health care professionals.[65]

1.6 Education in health sciences

The professional training of a doctor must aim to pursue not only theoretical-scientific knowledge but also service, the natural essence of the vocation.[66] Having fundamentals that allow all health professionals to recognize, manage, and interpret emotions—their own and those of others—is key to guarantee a high-quality human care.[66] There is a general awareness of the urgent need to include curricular programs that favor human development oriented to soft skills. However, it seems that medical training still favors a constant dehumanization over the training years.[66] That is why it is essential to promote research in this sense so that medical schools and universities actively contribute to the harmonious construction of society.

2. METHODS

A systematic review was carried out based on the PRISMA™ statement using PubMed™, Medigraphic™, and Researchgate™ as a search engine as well as the keywords Social Intelligence, Emotional Intelligence, Doctor-Patient Relationship, and Communication Skills. The inclusion criteria were relevance and consonance with medical profession (physician and nursing exercise), in accordance with the development of doctor-patient relationship (medical education, philosophical aspects, and clinical practice). The exclusion criteria were EI and SI applied to non-medical professions. A total of 115 articles were evaluated (Figure 1).

Risks of bias: It is necessary to promote quantitative studies that allow an objective approach to the practical and concrete benefits that soft skills grant in the exercise of the medical profession. This review is based on qualitative studies. Due to the lack of research on the development of SI as a competence to acquire a humanistic doctor-patient relationship, this systematic review does not include any meta-analysis.

3. RESULTS

The number of articles identified in the databases was 115, 10 of which were removed due to duplication. Twenty were excluded because they did not contain the variable relevance and consonance with medical profession (physician and nursing exercise), in accordance with the development of doctor-patient relationship (medical education, philosophical aspects, and clinical practice). Eighty-five articles were considered eligible and, finally, 75 articles were included in the systematic review.

Based on the diversity of definitions and SI structures (Table 1), we can analyze the importance given to this soft skill since 1920 social abilities have considered essential component of intelligence development, however there has been a huge contradiction in the educational paradigm implemented which truly does not include formal education in this sense, we must mention that it is essential that every medical student must be instructed or guided in order that the doctor-patient relationship is optimal for both the doctor and

TABLE 1. Definitions of intelligence and their evolution in time.

Definition of intelligence	Taking social intelligence into account	Author	Year
Three dimensions help the human being to understand and handle ideas, objects, and people.	Yes	Thorndike	1920
It is the sum of 7 skills, which are mental capacities.	No	Spearman Thurstone	1927
It is a set of capabilities integrated into a 4-level hierarchical structure.	Yes	Vernon	1933
It is the ability to act with a specific purpose, think rationally, and interact effectively with the environment.	Yes	Welchester	1944
It has a 3-dimensional composition, considering operations, content, and products, creating over 120 skills.	Yes	Giulford	1968
It is the ability to solve problems or produce products important in a cultural context or a given community.	Yes	Gardner	1983
NA	Yes	Goleman	1995

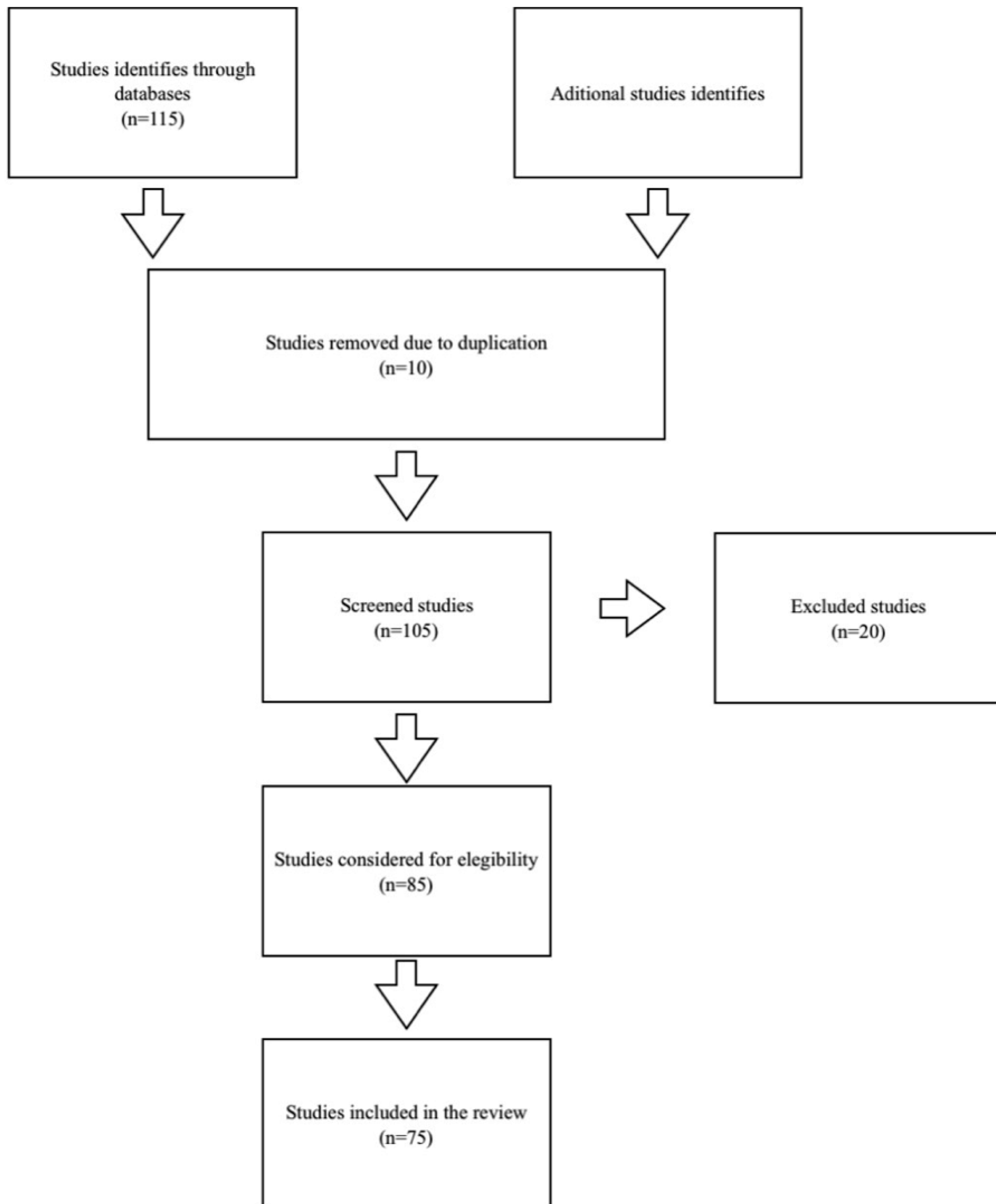


Figure 1. Review methodology.

the patient.[64] The general consensus that modern medicine is much more technical than humane should be reason enough to study and complement the phenomena. Over the years, the concept of SI has evolved and has become increasingly important in the case of the doctor-patient relationship. This is because medicine is a profession that emphasizes human contact, so it is essential that physicians have the skills and abilities that SI covers (Table 2).[65-66]

Social skills:

1. Assertive communications/active listening: expressing oneself clearly and directly, respecting others.

2. Emotional validation: a process of learning, understanding, and expressing acceptance of another person's emotional experience.

https://doi.org/10.36105/psrua.2021v1n1.07

3. Nonverbal language: the transference of any information through the use of any nonverbal means (> 80% of communication).

4. Conflict resolution and negotiation: a formal or informal competence that allows two different parties to find a peaceful resolution to any kind of conflict.

5. Respect: the defense and promotion of human dignity, treating or thinking of someone else based on these concepts.

6. Credibility: quality of being trusted or believed in.

The effective practice of medicine requires the ability of the physician to understand and identify the individual's temperament, motivations, humor, and intentions. So, they are able to interpret the social context of the patient.[67-69]

In the doctor-patient relationship, where SI represents the basis of an assertive communication between both parts in some situations (Table 3). For instance, there are cases where the doctor must communicate serious situations (diseases, deaths, among others) that involve pain, sadness, and deep emotions. In such cases, communicating adequately and assertively is vital and radiates in the skills and social capacity that both parties have. Communication must, however, be guided by the doctor.[70-72]

4. DISCUSSION

Communication skills are decisive in the harmonious construction of society and critical to the doctor-patient relationship.[73] Based on a deliberative model, SI is truly essential to an assertive communication that can be ensured in defense and promotion of human dignity. The social skills that SI guarantees are crucial to improve the doctor-patient relationship (Table 4).

Table 2. Social intelligence competences.

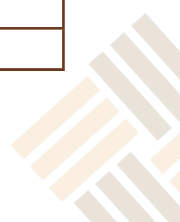
	Emotional aspects	Skills
Oneself	Emotional intelligence	
Towards others	Empathy and sympathy	Social skills: • Assertive communications/active listening • Emotional validation • Nonverbal language • Conflict resolution and negotiation • Respect • Credibility

Table 3. Doctor-patient relationship models.

Paternalism: There is no respect for the patient's autonomy, so there is no basis to argue for the need for communication skills.	**Informative:** The therapeutic decision is made entirely by the patient; humanistic skills as empathy or sympathy are not exercised.
Interpretative: The physician "interprets" the autonomic values of the patient subjectively, violating the person's dignity and reducing their autonomy.	**Deliberative:** This model promotes the person's dignity, requiring the presence of humanistic competences that favor adequate communication focused on the person's preponderant value.

Table 4. Benefits of promoting social intelligence in doctor-patient relationship.

Physician	Patient
Human dignity-based practice	
Assertive communication: true communication based on the patient's needs respecting corresponding values	
Professional practice	Experience of an ethical practice
Accompaniment	
Medical vocation centered on the person	



The general consensus regarding the need to humanize the medical sciences[74] leads us to reflect on the scarcely studied humanistic competences. Then, we will be able to promote a comprehensive medical education and a holistic conception of health as those who suggest medicine to be a vocation. EI and SI are tools that should not be underestimated[75] since they are the basis of a professional practice through the humanistic development of a doctor-patient relationship. The vision surrounding the importance of these competences draws attention to the actual medical education curricula. Today, the professional and human practice of medicine needs a humanistic commitment more than ever to complement the great scientific-technical development. Then, it is important to take into consideration both the direct and indirect curricular structure in medical schools. By doing so, humanistic attitudes can promote the acquisition of theoretical and practical knowledge and ensure the imprint character in health sciences students.

Individual and personal knowledge unquestionably leads to the development of social skills based on empathy. So, the doctor-patient communication is promoted from a more personalistic route, focusing on the dignity of the human person (Elio Sgreccia). Universities and health sciences professors must make a significant effort to lead medical education away from the prevailing over-technification. They should train medical students to benefit from the integral conception of the person and thus make them aware of the honor of being part of the health care system.

As Edmund Pellegrino stated: “medicine is the most humane of sciences, the most empiric of arts, and the most scientific of humanities.” One of the great challenges for medical sciences in the twentieth century is to combat the threat that dehumanization poses to professional healthcare practitioners and education. Medical education has a critical role to play in this situation.

5. CONCLUSIONS

The notion of a technical-scientific approach with a predominance over humanistic aspects must be challenged through the constant and direct promotion of the essential and determining vision of the medical vocation. There is no greater honor than to accompany a patient in a moment of great fragility and vulnerability since the doctor is clothed with a “generous soul and a spirit eager for science” (Aesculapius). This spirit fervently seeks not to belong to itself but to dedicate its life, honor, and assets to all those who put their health into the hands of the one who seeks to accompany them. Medicine must be seen as a reason to become a better person. This inspiring and aspirational vision will only be achieved through constant education directed through the teaching of comprehensive clinical-humanistic competences. Those abilities will allow the doctor to connect with himself and others (Social Intelligence). In this way, the doctor can work actively towards the harmonious construction of a better and fairer society.

6. ACKNOWLEDGMENTS

The authors thank Health Sciences Faculty at Universidad Anáhuac, México, the Doctor as a Humanist, International Association, and Prof. Jonathan McFarland, Head Academic Writing (Sechenov University).

CONFLICT OF INTERESTS

The authors declare no conflicts of interest.

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