The influence of the type of health service on communication between physicians and patients

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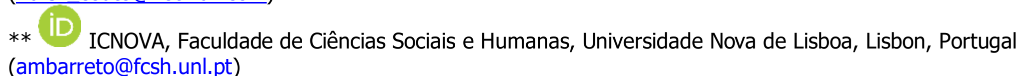
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Abstract

This study aims to carry out an exploratory assessment of whether the type of health service can mediate the effect of physicians' age and gender on their communication with patients.
A cross-sectional, quantitative survey was conducted with 144 adult patients with atopic dermatitis in Portugal and treated in public or private healthcare centers. Participants were recruited via the national patient association ADERMAP and completed an online questionnaire between December 2022 and August 2023. The instrument assessed patients' perceptions of physician communication across multiple dimensions, including clarity, emotional responsiveness, shared decision-making, and availability. Data were analyzed using descriptive statistics, Spearman's correlation, and Mann-Whitney U tests.
Findings support all three hypotheses. Regarding H1, the type of healthcare service influenced communication perceptions: physicians in the public sector were rated more positively on aspects such as the use of accessible language and responsiveness outside consultation hours. H2 was supported by the interaction between physician gender and service type: male physicians were rated more favorably in private care, whereas female physicians received higher ratings in public care. Finally, H3 was partially supported: in the private sector, older physicians were consistently associated with more favorable communication, while in the public sector, age effects were weaker and more mixed.
The results show that the type of health system in which the patient is followed (public or private) appears to influence the perception of communication, and that this effect is mediated by demographic factors such as the physician's age and gender. These findings emphasize the importance of healthcare organizations and training programs in addressing the interaction between individual characteristics and institutional context. Despite limitations such as a non-representative, diagnosis-specific sample and reliance on patient perceptions, the study contributes to a more comprehensive understanding of physician-patient interaction and offers guidance for equitable, context-sensitive communication practices.

Keywords: Physician-patient communication; Gender; Age; Public vs. private healthcare; Patient perceptions.

Introduction

Communication between physicians and patients is widely recognized as a fundamental pillar of clinical practice, being a determining factor in the effectiveness of diagnosis, adherence to treatment, and patient satisfaction (Markides, 2011; Street et al., 2009). The practice of effective communication leads to better

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health results and decreased medical mistakes and enhanced service delivery (Belim & Almeida, 2018). The importance of this skill is recognized, but the factors that influence health professional communicative performance remain insufficiently studied particularly in various organizational settings.

Research on health communication primarily studies relational and individual aspects, including empathy, active listening, and physicians' attitudes, but fails to examine structural variables such as the health service type where professionals work. Physicians' sociodemographic characteristics, such as gender and age, are associated with different communication styles. Female physicians tend to be more empathetic and open to patient participation, while younger physicians tend to be more patient-centered (Roter & Hall, 2004; Tsugawa et al., 2017a, 2017b; Couto & Barreto, 2024). However, the way in which these characteristics interact with the type of health service to influence communicative performance remains poorly understood. This is important because it may help identify subgroups of physicians or contexts where communication quality is particularly vulnerable or, conversely, where better practices can be found. Different organizational contexts impose material, temporal, and institutional conditions that can shape the style and quality of physician-patient communication (Barr, 1995; Mutiarasari et al., 2021).

Two types of health service can be identified: the public health service that offers universal health coverage, guaranteeing access to a wide range of health services for all citizens, regardless of their economic capacity; and the private one, limited to patients who can afford paid services with or without health insurance (Legido-Quigley, Otero, La Parra, Alvarez-Dardet, Martin-Moreno & McKee, 2013; Barros, Machado & Simões, 2011). Within public health systems, patients often experience greater satisfaction owing to the equitable access and quality of care provided. Conversely, in private healthcare settings, patients typically express higher levels of satisfaction due to comparatively greater physician availability, shorter waiting lists, and access to a broader array of services (Bleich, Ozaltin, & Murray, 2009). In the public sector, high care pressure and reduced consultation times may limit physicians’ willingness to establish patient-centered communication. In contrast, in the private sector, where contact is often more personalized, physicians may have more time and resources to invest in the relational quality of the consultation (Barros, Machado, & Simões, 2011).

This gap justifies the need to investigate whether the type of health service (public or private) mediates the relationship between physicians' personal variables (age and gender) and their communicative performance. In other words, are gender or age differences in communication styles reinforced or attenuated depending on the organizational context in which physicians work?

In this sense, the present study aims to: analyze the impact of the type of health service on physicians' communicative performance; explore how physicians' gender and age influence their communication style; investigate whether the type of health service functions as a mediating variable in the relationships between physicians' gender/age and their communication with patients.

By integrating patient-centered communication models, sociocognitive theories of clinical interaction, and the structural determinants of medical practice, this research contributes to a more comprehensive understanding of health communication in the Portuguese context. The results may inform training strategies, organizational adaptation, and public policies aimed at more equitable, effective, and humanized communication.

Literature Review

Health communication is an interdisciplinary field that draws knowledge from medicine, psychology, sociology and, in particular, communication sciences. Far from being limited to the mere transmission of information, physician-patient communication represents an interactive and dynamic process, where meaning is co-constructed between agents, being, as explained by Watzlawick et al. (1967) in their theory of human communication, inevitable and contextual. Its efficacy, as mentioned before, can directly influence clinical outcomes, treatment adherence and patient satisfaction (Street, Makoul, Arora & Epstein, 2009).
Several theoretical models have been developed to understand the complex nature of this interaction. Among the most relevant is patient-centered communication, which emphasizes the importance of empathetic, responsive and shared interaction, where the patient is actively involved in the care process (Epstein & Street, 2007). According to this model, the physician achieves better communication effectiveness through active listening and understanding of patient concerns while including the patient in making decisions. Another influential model is shared decision-making, which promotes co-responsibility in treatment by combining the physician's technical knowledge with the patient's values and preferences (Charles, Gafni, & Whelan, 1997). This model is particularly relevant in contexts with multiple therapeutic options, especially in private services, where patients tend to demand greater prominence in the management of their health (Barnea et al., 2022). The analysis benefits from Patient Activation Theory, which demonstrates how patient skills together with motivation to actively participate help them participate actively in their health (Hibbard et al., 2004). According to this theory, the willingness to communicate is influenced both by individual factors (such as health literacy) and by structural factors (for example, the type of health service and the relational quality in the interaction with the physician).
Considering this complexity, communicative performance in the clinical context can be defined as the practical expression of the physician’s communication skills. This includes active listening, empathy, clarity in explaining diagnoses, and openness to patient participation (Kurtz, Draper & Silverman, 2017). The willingness to communicate, in turn, refers to the attitude and motivation of health professionals to establish a meaningful dialogue with patients, a process that is visibly affected by institutional, cultural, and interpersonal factors (Bensing, 2000). The operationalization of these concepts, therefore, requires a systemic approach. As advocated by Kreps and Thornton (1992), and in line with the principles of strategic communication, health communication should be analyzed not only at the interpersonal level, but also in light of the organizational and cultural determinants that shape clinical interactions, such as the time available per consultation, hospital management models, and institutional incentives for the humanization of care. These elements, frequently studied in communication sciences (e.g., Goldhaber, 1993), demonstrate how structures influence communicative practices and the construction of meanings within health institutions (Brittain & Carrington, 2021; Vehvilainen et al., 2024).
The relational structure of clinical communication includes both verbal and nonverbal elements that create trust, mutual respect, and empathy between physicians and patients. Research on communication sciences shows that nonverbal communication (Sharkiya, 2023), along with rapport building (Jiang & Lam, 2021) serve as essential elements for creating a successful therapeutic relationship. For instance, communication styles that are more oriented towards dialogue and emotional support tend to increase patient satisfaction

and adherence to treatment (Roter & Hall, 2006). However, these relational structures may vary not only with the institutional context (public or private), but also with the sociodemographic characteristics of the physician, such as gender and age. The literature, for example, points out that female physicians generally demonstrate greater emotional sensitivity, active listening, and affective involvement in consultations, resulting in higher levels of patient satisfaction (Roter et al., 2004; Couto & Barreto, 2024). On the other hand, younger physicians may manifest greater openness to the patient's active participation, while more experienced physicians are often valued for their technical authority, although they may tend toward more directive communication styles (Tsugawa et al., 2017b; Couto & Barreto, 2024).

In Portugal, studies on clinical communication are still scarce and lack articulation with the main international theoretical frameworks. Although some studies analyze the satisfaction of users with public and private services, there is a significant gap in the relational and communicational analysis between physicians and patients, especially when considering variables such as gender and age of professionals. The failure to include these variables prevents researchers from studying physician personal characteristics and their relationship with different organizational settings. The absence of knowledge about this dynamic can lead to ineffective training interventions or health policies which can fail to recognize specific organizational characteristics or context, thus compromising the equity and effectiveness of health communication.

This gap thus justifies the need for research to understand how the different organizational contexts and personal attributes of physicians shape the performance of health communication in the country. In this sense, and based on the models and concepts presented, the present study proposes to fill this gap, investigating the following hypotheses based on the patient's perception:

H1: The type of health service (public or private) impacts physicians' communication with patients.
H2: The type of health service mediates the impact of physicians' gender on communication.
H3: The type of health service mediates the impact of physicians' age on communication.

This study focuses on how patients perceive physician communication, as their perspective is a key indicator of healthcare quality - reflecting both the effectiveness of clinical interactions and the patients' lived experience (Doyle, Lennox & Bell, 2013; Street, Makoul, Arora & Epstein, 2009). Patient perceptions capture the relational dimension of communication, which plays a central role in building trust and engagement in the care process (Thom, Hall & Pawlson, 2004). These perceptions are not shaped in a vacuum, but are influenced by contextual and demographic factors such as the organizational setting, and the physician's gender and age.

Methodology

This study followed a quantitative, descriptive, and correlational methodology, framed within a positivist paradigm. It aimed to explore patients' perceptions of physician-patient communication, considering

demographic factors such as physician age and gender, and the type of health service (public vs. private) in which care was provided.

A cross-sectional approach was used, based on a non-probabilistic convenience sample of 144 adult patients diagnosed with atopic dermatitis. Participants were recruited through ADERMAP (Associação Dermatite Atópica Portugal), a national patient association that provides support and disseminates information to individuals affected by this chronic skin condition. Inclusion criteria were as follows:

- Aged 18 or older;
- Diagnosed with atopic dermatitis;
- Receiving care from a dermatologist or allergist;
- To be treated in the public or private health system;
- Residing in the Greater Lisbon or Porto metropolitan areas, or in other regions of the country;
- Listed in ADERMAP's database.

According to internal estimates from ADERMAP, the association had 372 members during the period of the study. This provides useful contextual insight but does not constitute a representative national sample. Thus, findings should be interpreted as exploratory and hypothesis-generating rather than definitive or widely generalizable.

The recruitment strategy was shaped by the clinical characteristics of atopic dermatitis - a chronic, relapsing condition that requires continuous interaction with healthcare professionals. Using the association's network enabled access to patients with high engagement levels and direct experience within both public and private healthcare settings. Although this limits external validity and constrains the generalizability of findings, it aligns with the exploratory nature of the study and its focus on a single clinical condition. These methodological limitations are acknowledged and further addressed in the discussion.

In line with this rationale, the study focused exclusively on patients' perspectives, without triangulation from physician input, observational data or consultation transcripts. This was a deliberate methodological choice, given the study's aim to examine how communication is perceived by patients - perceptions that critically shape satisfaction, trust, and adherence. While this approach introduces a unidimensional view, it also allows for a more nuanced analysis of the experiential and emotional dimensions of communication, which are often underrepresented in traditional assessments.

Data were collected via an online structured questionnaire, designed by the research team and distributed between December 2022 and August 2023 through ADERMAP's email channels and social media platforms (e.g., Facebook and Instagram). The instrument included closed-ended demographic questions and a set of items measured using a 5-point Likert scale. These items evaluated whether, in patients' views, physician age and gender influenced their willingness to communicate, with this relationship potentially mediated by the type of healthcare service. Additional communication dimensions assessed included active listening, emotional responsiveness, clarity of explanations, involvement in decision-making, openness to questions, use of technical language, and availability outside consultation hours. The use of Likert scales is a widely accepted method for capturing attitudes, values, and judgments in behavioral research (Mellor & Moore, 2014).

All 144 responses obtained were complete and valid. Data were primarily analyzed using IBM SPSS Statistics (version 28), with Microsoft Excel employed for preliminary organization. Descriptive statistics were used to characterize the sample and summarize response distributions. For Likert scale items, measures of central tendency and dispersion - namely means and standard deviations - were also calculated.

To explore relationships between the healthcare setting, physicians' age, and perceived communication, Spearman's rank-order correlation coefficient was applied. This non-parametric test is particularly suited to ordinal variables and evaluates the strength and direction of monotonic relationships, with values ranging from −1 to 1 (Sánchez, 2023). Additional non-parametric tests were employed to accommodate the small sample size and the absence of normal distribution assumptions (Nahm, 2016).

To determine whether communication perceptions differed significantly between groups, the Mann-Whitney U test was used. This test serves as the non-parametric equivalent of the independent-samples t-test and was applied to compare responses across healthcare settings (public vs. private) and between male and female physicians (MacFarland & Yates, 2016). Statistical significance was established at $p < 0.05$.

Results

Sample Profile

The sample consisted of 144 participants diagnosed with atopic dermatitis, predominantly female (77.8%) and holding higher education degrees (67.4%). Most respondents were followed in the public healthcare system (59.7%), with a significant proportion residing in the Greater Lisbon area (42.4%).

Physician Gender Distribution

Across the full sample, 56.9% of patients reported being followed by a female physician, while 43.1% reported male physicians. When disaggregated by healthcare sector, gender distribution varied notably. In the private sector, gender was evenly split, with equal proportions (50%) of patients followed by male and female physicians. In contrast, the public sector showed a predominance of female physicians: 62% versus 38% male.

Physician Age Distribution

Physician age spanned a broad range, with the majority of patients (70.1%) reporting that their doctors were between 30 and 49 years old. Age distribution varied by sector: in the private healthcare system, physicians tended to be older, with 40% aged 40-49 and an additional 31% aged 50 or above. In the public sector, there was a clear concentration of physicians in the 30-49 age group (71%), with relatively fewer practitioners in the older age brackets.

The Impact of Healthcare Service Type on Physician-Patient Communication (H1)

A Mann-Whitney U test was used to examine differences in perceived communication between public and private healthcare settings. The analysis revealed that the type of healthcare service - public vs. Private - had a measurable influence on patient perceptions of physician communication. In general, physicians

working in the public healthcare sector were rated more positively across several communication indicators (consult Table 1 in the Appendix).

Two dimensions showed statistically significant differences in favor of public physicians: the use of accessible, non-technical language (p = 0.030) and availability to respond to patients outside of consultation hours (p = 0.006). These results suggest that public sector physicians may adopt more inclusive and patient-centered communication strategies or at least be perceived as more responsive and approachable.

Several other variables showed marginal significance, such as involvement of the patient in therapeutic decision-making (p = 0.096), reduced use of overly technical language (p = 0.098), and better disease stability as perceived by the patient (p = 0.073). While these trends point toward a potential communicative advantage for public healthcare providers, the limited strength of the statistical evidence cautions against overinterpretation.

These findings support hypothesis H1 and indicate that, contrary to the assumption that private sector care is inherently more attentive, patients in this study perceived physicians in public settings as more communicative and accessible in several key respects.

Gender Differences and the Mediating Role of Healthcare Setting (H2)

Using the Mann-Whitney U-test, the data revealed a nuanced interaction between physician gender and the type of healthcare service in shaping communication experiences. In line with hypothesis H2, the effects of gender on perceived communication varied depending on whether the physician worked in the public or private sector.

Comparing male and female physicians in the private health sector, male physicians received significantly higher ratings in several areas than female physicians (consult Table 2 in the Appendix). They were more likely to clarify patient doubts (p = 0.017), explain prescribed tests and treatments (p = 0.024), ensure patient understanding (p = 0.019), and actively involve patients in decision-making (p = 0.029). Within the public health service, there were no statistically significant differences between male and female physicians in the various aspects of the communications analyzed (consult Table 3 in the Appendix).

Comparing female physicians in the public and private sectors, female physicians were more positively evaluated in public sector (consult Table 4 in the Appendix). Significant differences were found in their perceived availability to receive patients (p = 0.034), commitment to ensuring patient understanding (p = 0.040), and greater involvement of patients in the therapeutic process (p = 0.014). Female physicians in public sector were also seen as more genuinely interested in the patient beyond the disease itself (p = 0.038) and more accessible outside consultation hours (p = 0.021). It should be noted that between the two health services (public/private), when it comes to male physicians, there are no differences in the communication aspects evaluated (consult Table 5 in the Appendix).

Taken together, these results suggest that the gender of the physician interacts with the healthcare setting in shaping how communication is perceived. Female physicians in public care and male physicians in private care received the most favorable evaluations—highlighting how both individual and institutional factors jointly influence the physician-patient dynamic.

Age Differences and the Mediating Role of Healthcare Setting (H3)

Spearman's rank correlation revealed nuanced associations between physician age and communication, differentiated by sector, supporting the hypothesis that the type of health service mediates this effect (consult Table 6 in the Appendix).

In the private healthcare setting, older physicians were consistently rated more positively across several communication dimensions. Statistically significant positive correlations were observed between physician age and the use of accessible language ($p = 0.029$), clarity of information provided ($p = 0.027$), and patients' perceptions of disease stability ($p = 0.017$). In addition, older physicians were more likely to allow patients to speak without interruption ($p = 0.034$) and showed less concern about consultation time ($p = 0.002$). These patterns suggest that in private settings, increased age may be associated with a more patient-centered communication style, possibly reflecting greater professional autonomy or experience.

In contrast, in the public sector, the effects of physician age on communication were weaker and less consistent. A significant negative correlation emerged between age and the use of accessible language ($p = 0.035$), suggesting that older physicians in this setting may rely more on technical language. However, they were also perceived as less constrained by consultation time ($p = 0.003$). No other significant effects were observed.

Overall, these findings indicate that the positive impact of physician age on communication is more pronounced in the private sector, whereas in the public system, structural or systemic constraints may limit the extent to which age and experience translate into improved communication.

Results discussion

The results of this study underscore the relevance of both organizational and sociodemographic variables in shaping physician-patient communication. Through the analysis of patients' perceptions regarding dermatological consultations, within public and private healthcare settings in Portugal, the study provides empirical support for the notion that communication in clinical contexts is not merely an individual skill but a relational and systemic process, influenced by structural conditions, gender dynamics, and professional experience.

In relation to the first hypothesis (H1), the findings indicate that the type of healthcare service significantly affects communication. Contrary to much of the existing literature suggesting greater patient satisfaction in private healthcare due to enhanced service responsiveness and shorter waiting times (Bleich et al., 2009; Mutiarasari et al., 2021), patients in this study evaluated public sector physicians more favorably on several key communication dimensions - particularly the use of accessible language and the availability of physicians outside scheduled consultation hours. These results align with the assumptions of patient-centered communication models (Epstein & Street, 2007) and suggest that, even under conditions of greater time pressure and institutional constraint, public physicians may adopt more inclusive and empathetic communication practices. This supports the view articulated by Barr (1995) and Barros et al. (2011) that public sector professionals may cultivate relational strategies that compensate for organizational limitations, particularly in systems structured around equity and universality.

The second hypothesis (H2) was also supported, revealing a complex interaction between physician gender and healthcare context. In the private sector, male physicians were rated more favorably in areas such as

clarifying doubts, ensuring patient understanding, and involving patients in decision-making. Conversely, in the public sector, female physicians received significantly higher evaluations in emotional responsiveness, availability and patient engagement. These findings are consistent with previous studies that emphasize gendered differences in communication styles - where female physicians tend to be more empathetic, participatory, and emotionally attuned (Roter & Hall, 2004; Couto & Barreto, 2024). However, the study goes further by demonstrating that these differences are not universal across settings; instead, they are shaped by institutional context. As suggested by Vehvilainen et al. (2024), perceptions of authority, empathy, and attentiveness are mediated by organizational structures and cultural norms, and female physicians may be especially valued in the public sector due to the alignment of their communication style with the expectations of equity-driven service models.

Regarding the third hypothesis (H3), the findings partially support the idea that physician age positively influences communication, but only within the private sector. Older physicians in private care were more likely to use accessible language, encourage patient expression, and show less concern with time constraints - an effect likely attributable to greater professional autonomy, clinical experience, and perhaps fewer bureaucratic pressures. These results resonate with previous research showing that age and experience are associated with more patient-centered behaviors in less rigid institutional settings (Tsugawa et al., 2017b). However, in the public sector, the impact of age on communication was more ambivalent: older physicians were seen as less time-focused but were also more likely to use technical or inaccessible language. This suggests that institutional constraints may diminish the communicative benefits typically associated with clinical seniority, reinforcing Bensing's (2000) argument that structural limitations can undermine otherwise effective communication styles.

These findings gain further relevance when considered in light of systemic communication models (Kreps & Thornton, 1992; Kurtz et al., 2017), which emphasize that communicative performance is not reducible to individual traits but reflects broader organizational and cultural influences. The observed interplay between physician characteristics and healthcare setting underscores the value of adopting a contextual, intersectional framework to understand clinical communication. For instance, communication outcomes cannot be evaluated meaningfully without reference to institutional workload, patient expectations, and sociocultural scripts around gender and authority.

However, the interpretation of these findings must be tempered by several limitations. First, the study's sample is non-representative and composed exclusively of patients with atopic dermatitis recruited through a patient association - ADERMAP. These participants are likely to have higher-than-average engagement with healthcare services and specific expectations regarding physician communication, which may not reflect the experiences of patients in other clinical domains or with acute conditions. Second, the study relies solely on patient-reported data, which, while valuable for capturing lived experiences (Doyle et al., 2013), exclude the perspectives of physicians and omit observational verification of communication behaviors. The absence of triangulated data thus limits the capacity to make definitive claims about causality or behavioral intent.

Moreover, relevant contextual variables such as consultation length, institutional incentives, or electronic health record use were not measured. These structural factors likely mediate the extent to which individual physicians can implement patient-centered communication. Finally, cultural expectations related to gender roles may have shaped how patients interpreted physicians' behaviors, especially in differentiating perceived empathy or assertiveness. These dimensions were not explicitly analyzed but may have influenced the

patterns observed - particularly the higher ratings for male physicians in private settings and female physicians in public ones.

In sum, the study offers a novel contribution to the literature on clinical communication in Portugal by empirically demonstrating that the type of healthcare service (public vs. private) mediates the influence of physicians' gender and age on their communication with patients, within the context of Portuguese dermatological care. The findings highlight the need for training programs and institutional policies that are sensitive not only to individual-level competencies but also to the systemic and symbolic contexts in which communication takes place. Future research should aim to broaden the sample, incorporate physician perspectives, and analyze communication dynamics through longitudinal or observational designs to better capture the interactive, multilevel nature of clinical encounters.

Conclusion

This study set out to examine how physician-patient communication is influenced by the interplay between healthcare service type, physician gender, and physician age, based on the perceptions of patients living with atopic dermatitis. By focusing on a chronic condition that necessitates sustained clinical relationships, the study highlights how institutional and demographic factors jointly shape patients' communicative experiences.

The key contribution lies in demonstrating that physician communication is not a static, individual trait but rather a dynamic, relational process embedded within specific organizational contexts. The findings challenge the assumption that private healthcare automatically ensures superior communication, revealing that public sector physicians - especially female professionals - are often perceived as more accessible, emotionally attuned, and patient-centered.

These results underscore the importance of adopting context-sensitive, equity-oriented approaches to clinical communication. Rather than applying universal training models, health systems and educational programs should tailor interventions to institutional realities and to the interplay of gender, age, and organizational structure.

While the study provides meaningful empirical insights, its scope is limited by its non-representative, diagnosis-specific sample and reliance on self-reported patient perceptions. Future research should expand the clinical scope, include physicians' perspectives, and incorporate observational or longitudinal methods to deepen understanding of communicative dynamics across diverse healthcare settings.

Such work will be essential to the development of more inclusive, context-sensitive communication frameworks that reflect the complexity of real-world healthcare interactions.

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Appendix

Table 1: Relationship between the health service where the physician works and the predisposition to communicate

	Public Health Service		Private Health Service		
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**P**
Availability to receive patients	4.12	1.022	3.97	1.092	0.213
Physician actively listening during consultation	4.29	1.016	4.14	1.083	0.166
Physician addresses the emotional part of the patient	3.84	1.187	3.69	1.314	0.302
Physician clarifies all doubts	4.19	0.101	4.21	0.969	0.395
Physician uses easy-to-understand language	4.41	0.925	4.21	0.874	0.03
Physician explains treatments and tests that prescribes	4.34	0.849	4.24	0.979	0.361
Physician lets patient ask all the important questions	4.35	1.026	4.19	1.067	0.151
Physician makes sure there are no doubts about what was said and decided in consultation	4.01	1.143	3.88	1.141	0.206
Physician involves patient in the therapeutic decision-making process, valuing the user's opinion	3.99	1.213	3.76	1.247	0.096
Physician is interested in the patient and not just the disease	3.81	1.27	3.57	1.258	0.1
Physician responds to contacts outside consultation hours	3.48	1.516	2.79	1.62	0.006
Physician explains therapeutic indications several times	3.62	1.257	3.45	1.273	0.208
As long as the patient is followed by this Physician, the disease is stable	3.78	1.358	3.57	1.171	0.073
Patient has no difficulty understanding the information the Physician gives	4.41	1.045	4.43	0.775	0.209
Physician does not use very technical language	4.19	1.057	3.98	1.068	0.098
The Physician is not concerned about keeping the appointment time	3.66	1.289	3.78	1.155	0.362
Physician does not interrupt the patient and lets him finish speaking	4.49	0.878	4.38	0.952	0.222
Physician is not focused on the computer during the consultation	3.8	1.291	4.09	1.097	0.126

Source: Authors

Table 2: Communication relationship between physician and patient according to the physician's gender and the private health service he or she works

Private Health Service	Male		Female		
	Mean	Standard Deviation	Mean	Standard Deviation	P
Availability to receive patients	4.1	1.145	3.83	1.037	0.117
Physician actively listening during consultation	4.28	0.996	4	1.165	0.196
Physician addresses the emotional part of the patient	3.79	1.320	3.59	1.323	0.239
Physician clarifies all doubts	4.41	0.983	4	0.926	0.017
Physician uses easy-to-understand language	4.28	0.960	4.14	0.789	0.161
Physician explains treatments and tests that prescribes	4.45	0.985	4.03	0.944	0.024
Physician lets patient ask all the important questions	4.34	1.111	4.03	1.017	0.058
Physician makes sure there are no doubts about what was said and decided in consultation	4.1	1.235	3.66	1.010	0.019
Physician involves patient in the therapeutic decision-making process, valuing the user's opinion	3.97	1.349	3.55	1.121	0.029
Physician is interested in the patient and not just the disease	3.72	1.306	3.41	1.211	0.143
Physician responds to contacts outside consultation hours	2.86	1.663	2.72	1.601	0.387
Physician explains therapeutic indications several times	3.48	1.299	3.41	1.268	0.415
As long as the patient is followed by this Physician, the disease is stable	3.66	1.289	3.48	1.056	0.199
Patient has no difficulty understanding the information the Physician gives	4.48	0.785	4.38	0.775	0.293
Physician does not use very technical language	3.83	1.197	4.14	0.915	0.205
The Physician is not concerned about keeping the appointment time	3.86	1.187	3.69	1.137	0.238
Physician does not interrupt the patient and lets him finish speaking	4.38	1.049	4.38	0.862	0.366
Physician is not focused on the computer during the consultation	4.28	1.032	3.9	1.145	0.079

Source: Authors

Table 3: Communication relationship between physician and patient according to the physician's gender and the public health service where he or she works

Public Health Service	**Male**		**Female**		
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**P**
Availability to receive patients	3.94	1.029	4.23	1.012	0.081
Physician actively listening during consultation	4.27	0.977	4.3	1.049	0.356
Physician addresses the emotional part of the patient	3.73	1.206	3.91	1.181	0.229
Physician clarifies all doubts	4.18	1.158	4.19	1.075	0.459
Physician uses easy-to-understand language	4.48	0.972	4.36	0.901	0.16
Physician explains treatments and tests that prescribes	4.36	0.859	4.32	0.85	0.373
Physician lets patient ask all the important questions	4.33	1.137	4.36	0.963	0.336
Physician makes sure there are no doubts about what was said and decided in consultation	4.03	1.132	4	1.16	0.462
Physician involves patient in the therapeutic decision-making process, valuing the user's opinion	3.97	1.185	4	1.24	0.393
Physician is interested in the patient and not just the disease	3.73	1.257	3.87	1.287	0.268
Physician responds to contacts outside consultation hours	3.48	1.417	3.47	1.588	0.448
Physician explains therapeutic indications several times	3.76	1.146	3.53	1.324	0.256
As long as the patient is followed by this Physician, the disease is stable	3.91	1.4	3.7	1.339	0.165
Patient has no difficulty understanding the information the Physician gives	4.48	1.034	4.36	1.058	0.215
Physician does not use very technical language	4.15	1.228	4.21	0.948	0.353
The Physician is not concerned about keeping the appointment time	3.67	1.339	3.66	1.285	0.479
Physician does not interrupt the patient and lets him finish speaking	4.36	0.895	4.57	0.866	0.104
Physician is not focused on the computer during the consultation	3.85	1.302	3.77	1.296	0.375

Source: Authors

Table 4: Communication relationship between physician and patient, taking into account the physician's gender - female - and the health service where they work

	Public Health Service		Private Health Service		
	Female		Female		
	Mean	Standard Deviation	Mean	Standard Deviation	P
Availability to receive patients	4.23	1.012	3.83	1.037	0.034
Physician actively listening during consultation	4.3	1.049	4	1.165	0.096
Physician addresses the emotional part of the patient	3.91	1.181	3.59	1.323	0.145
Physician clarifies all doubts	4.19	1.075	4	0.926	0.109
Physician uses easy-to-understand language	4.36	0.901	4.14	0.789	0.06
Physician explains treatments and tests that prescribes	4.32	0.85	4.03	0.944	0.086
Physician lets patient ask all the important questions	4.36	0.963	4.03	1.017	0.054
Physician makes sure there are no doubts about what was said and decided in consultation	4	1.16	3.66	1.01	0.04
Physician involves patient in the therapeutic decision-making process, valuing the user’s opinion	4	1.24	3.55	1.121	0.014
Physician is interested in the patient and not just the disease	3.87	1.287	3.41	1.211	0.038
Physician responds to contacts outside consultation hours	3.47	1.588	2.72	1.601	0.021
Physician explains therapeutic indications several times	3.53	1.324	3.41	1.268	0.323
As long as the patient is followed by this Physician, the disease is stable	3.7	1.339	3.48	1.056	0.122
Patient has no difficulty understanding the information the Physician gives	4.36	1.058	4.38	0.775	0.286
Physician does not use very technical language	4.21	0.948	4.14	0.915	0.329
The Physician is not concerned about keeping the appointment time	3.66	1.285	3.69	1.137	0.467
Physician does not interrupt the patient and lets him finish speaking	4.57	0.866	4.38	0.862	0.101
Physician is not focused on the computer during the consultation	3.77	1.296	3.9	1.145	0.406

Source: Authors

Table 5: Communication relationship between physician and patient according to the physician's gender - male - and the health service where he works

	Public Health Service		**Private Health Service**		
	Male		**Male**		
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**	**P**
Availability to receive patients	3.94	1.029	4.1	1.145	0.208
Physician actively listening during consultation	4.27	0.977	4.28	0.996	0.489
Physician addresses the emotional part of the patient	3.73	1.206	3.79	1.32	0.354
Physician clarifies all doubts	4.18	1.158	4.41	0.983	0.219
Physician uses easy-to-understand language	4.48	0.972	4.28	0.96	0.1
Physician explains treatments and tests that prescribes	4.36	0.859	4.45	0.985	0.253
Physician lets patient ask all the important questions	4.33	1.137	4.34	1.111	0.493
Physician makes sure there are no doubts about what was said and decided in consultation	4.03	1.132	4.1	1.235	0.321
Physician involves patient in the therapeutic decision-making process, valuing the user's opinion	3.97	1.185	3.97	1.349	0.387
Physician is interested in the patient and not just the disease	3.73	1.257	3.72	1.306	0.486
Physician responds to contacts outside consultation hours	3.48	1.417	2.86	1.663	0.075
Physician explains therapeutic indications several times	3.76	1.146	3.48	1.299	0.215
As long as the patient is followed by this Physician, the disease is stable	3.91	1.4	3.66	1.289	0.134
Patient has no difficulty understanding the information the Physician gives	4.48	1.034	4.48	0.785	0.221
Physician does not use very technical language	4.15	1.228	3.83	1.197	0.105
The Physician is not concerned about keeping the appointment time	3.67	1.339	3.86	1.187	0.324
Physician does not interrupt the patient and lets him finish speaking	4.36	0.895	4.38	1.049	0.374
Physician is not focused on the computer during the consultation	3.85	1.302	4.28	1.032	0.11

Source: Authors

Table 6: Communication relationship between physician and patient, taking into account the physician's age and the health service where he or she works

	Public Health Service		**Private Health Service**	
	Rs	**P**	**Rs**	**P**
Availability to receive patients	0.132	0.113	-0.045	0.368
Physician actively listening during consultation	0.156	0.075	0.071	0.298
Physician addresses the emotional part of the patient	0.11	0.158	0.013	0.462
Physician clarifies all doubts	0.061	0.288	0.185	0.082
Physician uses easy-to-understand language	-0.197	0.035	.251*	0.029
Physician explains treatments and tests that prescribes	-0.072	0.254	0.194	0.072
Physician lets patient ask all the important questions	0.098	0.185	0.101	0.225
Physician makes sure there are no doubts about what was said and decided in consultation	0.035	0.373	0.116	0.192
Physician involves patient in the therapeutic decision-making process, valuing the user’s opinion	0.079	0.236	0.003	0.492
Physician is interested in the patient and not just the disease	0.062	0.285	0.192	0.075
Physician responds to contacts outside consultation hours	0.084	0.221	0.119	0.187
Physician explains therapeutic indications several times	0.079	0.234	0.028	0.416
As long as the patient is followed by this Physician, the disease is stable	0.033	0.38	.278*	0.017
Patient has no difficulty understanding the information the Physician gives	-0.112	0.153	.254*	0.027
Physician does not use very technical language	-0.153	0.079	0.153	0.126
The Physician is not concerned about keeping the appointment time	.297**	0.003	.378**	0.002
Physician does not interrupt the patient and lets him finish speaking	0.01	0.463	.241*	0.034
Physician is not focused on the computer during the consultation	0.021	0.424	0.198	0.068

*. The correlation is significant at the 0.05 level (1 tail).

**. The correlation is significant at the 0.01 level (1 tail).

Source: Authors