Pharmacist–Patient Communication in Prostate Cancer as a Strategy to Humanize Health Care: A Qualitative Study

Aline Scarabelin, B. Pharm[1], Aline Santana Dosea, MSc[2],
Patricia Melo Aguiar, PhD[1] , and Sílvia Storpirtis, PhD[1]

Abstract

Background: Pharmacists require effective communication skills to enhance involvement in patient care. Nevertheless, there are few qualitative studies exploring "how" pharmacist–patient communication occurs and none targets patients with cancer. **Objective:** To describe the perceptions of outpatients with prostate cancer regarding the communication process during clinical pharmacy service in a community pharmacy. **Methods:** A qualitative study was performed from semistructured interviews with 10 patients. These interviews were audiotape-recorded and transcribed comprehensively, and the data were analyzed using content analysis. The validation of the categories and registration units was made by 2 independent authors and reviewed by a third author. **Results:** Three categories were established from the content analysis (general perceptions of the pharmacist–patient communication, potentialities of effective communication, and points for improvement). Communication is a complex process and involves, in addition to information exchange, the sharing of thoughts, desires, and fears. Our findings hold that effective communication skills by pharmacist can help patients validate their concerns, develop a trusting patient–pharmacist relationship, address drug therapy problems, and lead to better health outcomes. **Conclusion:** Pharmacist–patient communication is an important strategy for humanized practice. This allows the pharmacist to see beyond an individual with health problems to a human being with particularized needs.

Keywords

communication, pharmacist–patient relationship, patient-centered care, prostate cancer, oncology

Introduction

Prostate cancer is the most common type of cancer in the male population worldwide. In 2015, estimates indicate that there were 1.6 million cases of prostate cancer and 366 000 deaths (1). In Brazil, this cancer is also the most recurrent in men (1), and its incidence and mortality rates increased on average by 2.8% and 1.6% per year, respectively (2). Thus, it can be inferred that prostate cancer can substantially impact health services, requiring strategies to better meet the multiple needs of patients.

Pharmacy practice has changed substantially in recent years. The professionals have the opportunity to contribute directly to patient care in order to reduce morbimortality related to medication use, promoting health and preventing diseases (3). From this premise, current systematic review showed that clinical pharmacist interventions have significantly improved many health outcome measures in outpatients with cancer (4). However, the literature shows that most pharmacist–patient interactions still occur following a biomedical model with patients playing a passive role and pharmacists focusing primarily on providing medication-related information (5).

To transition to patient-centered care, pharmacy services should organize around the understanding of patients' needs, preferences, and expectations for the clinical judgment and decision-making processes (6). This is mainly important in cancer care, since the demands of patients are often complex and painful and not necessarily related to the biological

[1] Department of Pharmacy, Faculty of Pharmaceutical Sciences, University of Sao Paulo, Sao Paulo, Brazil
[2] Department of Pharmacy, Federal University of Sergipe, São Cristovao, Brazil

Corresponding Author:
Patricia Melo Aguiar, Department of Pharmacy, Faculty of Pharmaceutical Sciences, University of Sao Paulo. Av. Prof. Lineu Prestes, 580, Conj. das Químicas, Bloco 13, Cidade Universitária Butantã, Sao Paulo, Brazil.
Emails: aguiar.pm@usp.br; patyaguiar14@hotmail.com

aspects of the illness. The professional should also pay attention to the implications for everyday life that can change the patient's family and social roles as well as the emotional suffering caused by cancer (7).

Faced with these challenges, effective communication skills can help pharmacists establish the rapport necessary to build trusting relationships and to ensure an exchange of information necessary to appreciate patient needs and to deliver successful interventions (8). Despite the importance of the topic, there are few studies exploring "how" pharmacist–patient communication occurs (qualitative research), and none targets outpatients with cancer (5). In this sense, the purpose of this study was to describe the perceptions of outpatients with prostate cancer regarding the communication process during a clinical pharmacy service in a community pharmacy.

Methods

Study Design and Setting

The qualitative study was conducted at Farmácia Universitária da Universidade de São Paulo (FARMUSP), Brazil. This pharmacy was set up on the campus and is linked to the Faculty of Pharmaceutical Sciences. Since 2014, the FARMUSP has partnerships established with the University Hospital of the University of Sao Paulo and the Secretariat of Health of the State of Sao Paulo for the delivery of a practice model seeking a holistic and patient-centered approach. Face-to-face individual monthly consultations, each lasting about 60 minutes, were scheduled in a comfortable private room at FARMUSP. During these consultations, the clinical pharmacists dispensed government-funded antiandrogen drugs (cyproterone and/or goserelin) and performed a comprehensive medication review—assessing each medication for appropriateness, effectiveness, safety, and adherence. Pharmaceutical interventions were focused on health education and monitoring of drug-therapy problems. If the solution to any of the problems required changing the treatment regimen or ordering the laboratory tests, the patient's prescribers were contacted in person or by letter. The pharmacy staff included 4 pharmacists and pharmacy students.

Participant Recruitment

The researcher (A.S.) recruited patients from FARMUSP using the following inclusion criteria: ≥18 years of age, attended at FARMUSP for at least 6 months, diagnosis of persistent or recurrent prostate cancer after surgery or radiation therapy, and using government-funded cyproterone and/or goserelin (continuous or intermittent treatment). From a population of 30 patients who attended at the FARMUSP, convenience sampling was used to identify patients for interview. The interviews were carried out until the saturation and wide homogeneity of the obtained data were reached, that is, the answers provided by the participants began to be similar, without additional information (9). The data saturation was reached at the time of the interview with participant number

10. All patients invited to participate attended the request and signed a written informed consent form.

Data Collection

The individual interviews were conducted by researcher in June 2016. All interviews were audiotape-recorded and performed in a private room. They were guided by a script with semistructured questions to understand the patients' perceptions of the communication process during delivery of clinical pharmacy service at FARMUSP. For instance: What is your impression of pharmacist–patient communication? What might be the facilitators and barriers during the communication process? What aspects do you think should be improved in communication? In addition, data were collected to characterize the participants, such as age, education, marital status, occupation, and type of antiandrogenic drugs (goserelin and/or cyproterone).

Data Analysis

Data were analyzed using content analysis proposed by Bardin (10), in which reports are organized and systematized into categories and registration units. This method involves organization and analysis of reported content to make inferences. The technique comprises 3 phases, as can be seen in Table 1. Cross-validation to confirm the data interpretation was undertaken independently by 2 investigators (A.S. and A.S.D.). Then a third author (P.M.A.) compared the 2 analyses and established definitively the final categories and units of registry.

Results

Participant Characteristics

Ten outpatients with prostate cancer who used the FARMUSP were interviewed (Table 2). For better characterization, these patients were labeled with "P" (for patient) followed by a number according to the sequence of the interviews.

Interview Categorization

Content analysis was performed after each interview with the patient (with more than 220 hours of conversation), and the categories and registration units established are shown in Table 3.

General Perceptions of the Pharmacist–Patient Communication

Throughout the interviews, the patients showed great interest in the clinical pharmacy service model offered at the FARMUSP. They consider the study setting to encourage greater communication, since it occurs from the time the patients walk into the FARMUSP to the appointment itself, as reported by P2, "I think there are 2 very important aspects. To start with, the security staff receive us very well. Then,

Table 1. Technique of Content Analysis.

Phases	
Preanalysis	• The material is organized • Initial ideas are systematized • Text cutouts are made in the analysis of documents
Exploration of the material	• Data are aggregated into categories and subcategories (registration units)
Interpretation	• The material is interpreted • Some inferences are made

Table 2. Characterization of Participants' Sample by Age, Education, Marital Status, Profession, and Type of Treatment.

Patient	Age	Education	Marital Status	Profession	Treatment
P1	77	High school	Married	Businessman	Goserelin
P2	67	Elementary school	Engaged	Maintenance technician	Cyproterone
P3	72	High school	Married	Retired	Goserelin
P4	80	Elementary school	Married	Retired	Goserelin
P5	76	Elementary school	Married	Retired	Goserelin
P6	62	Elementary school	Married	Retired	Goserelin
P7	77	Elementary school	Married	Retired	Cyproterone
P8	91	Elementary school	Married	Retired	Cyproterone
P9	91	Elementary school	Married	Retired	Cyproterone
P10	77	Elementary school	Married	Retired	Goserelin

Table 3. Perceptions of Outpatients With Prostate Cancer of the Communication Process With Pharmacists.

Categories	Registration Units/Sense Cores
General perceptions of pharmacist–patient communication	• Environment favors communication (hosting, privacy, respect) • Satisfactory approach to delicate health issues (cancer, erectile dysfunction) • Information provided meets patient expectations • Use of accessible language by the pharmacist • Freedom to express opinions, needs, and emotions • Importance of the verbal and written approach to improve understanding • Sufficient appointment time • More effective communication than other health professionals • Doubts about the need for other person during the appointment
Potentialities of effective communication	• Facilitates the clarification of questions and understanding about medications • Improves attitudes related to lifestyle (physical activity, diet) • Improves medication adherence • Improves patient self-efficacy and empowerment • Prevents drug-therapy problems • Facilitates coping with the disease • Facilitates the interaction of patient with other health professionals
Points for improvement	• Greater communication with other patients to share experiences

the pharmacy staff—everyone comes to greet you, ask how are you, if you are feeling well, how are you doing. Then, when I get the assistance by P. [the patient informs the name of the pharmacist], the thing gets even better because she is capable of what she does. I like it a lot." Therefore, the user embracement and respect shown by the pharmacists generate greater patient satisfaction. According to P9, "We arrive here, we are already received with hugs—do you know what I mean? I mean, it's good to come, it's good to come here, do you know?"

Because patients had prostate cancer, during the appointments, it was often necessary to have conversations on more delicate themes. Erectile dysfunction was the most highlighted factor, and the patients emphasized that there was openness to the dialogue: "Like I told you, I have this problem of erection. Then, I told her. And I got to talk to her; I could explain to her" (P2). Additionally, cancer is considered a disease that causes significant impact on the physical and mental health of the patient. According to P6, "I think, for those who have this problem, it's not a big deal for others

to say nice words to us. To make you feel better, do you know? We're kind of thinking about it."

The patients were also very satisfied with the pharmacists' guidance and declared that their expectations were reached. P1, for example, reported that, despite their limitations, he can understand the counseling: "You can understand. Here, it is weak [pointing to the head], but right? [the pharmacist] Explain it right." P5 emphasized his satisfaction with the following citation: "If I had difficulty [with the relationship with the pharmacist], I certainly would not come." This is mainly because pharmacists used language accessible to patients of all educational levels. According to P9, "No, I do not think it is difficult, because, when I was studying, I did not go deep, but I learned Portuguese more or less, do you understand? So, for me, what they say is very clear." Besides, the pharmacists give the patients freedom to express their needs, fears, and opinions: "I feel very good when I'm talking to her. There's something about my life [for example, sex life] that I just talked only to her. She made me understand a lot of things that I didn't know" (P2).

In addition to verbal language, the patients stated the importance of receiving written information, as P4 pointed out: "I think that the information is fundamental in many ways, especially if you take a written part, because that's what I just said: you forget it. I had a teacher who told me the following: never trust in the mind; write it. And it's true. Especially for me, how easy it is for me to forget things. I do not know if it is because of age, [but] one thing leads to another."

During the delivery of clinical pharmacy service at the FARMUSP, the pharmacists had an appointment time lasting from approximately 1 hour (first encounter) to 30 minutes (subsequent encounters). Most patients were satisfied with the available appointment times: "For me, the time for the appointment is excellent, because there will always be a question that you can ask talking there at that time" (P3).

Compared to the communication with the other health professionals, the patients felt that the exchange of information with the pharmacist was more effective, as P2 highlighted: "One thing you cannot find out there. They treat you very well. Out there, people do not hear you as well as they do here. For us, who are patients, the care, respect, that they have for us is fundamental for the patient."

It is worth mentioning the patients' doubts concerning the presence or absence of another person (eg, family) to assist them in the communication during the appointments. Some patients demonstrated autonomy to participate in appointments by themselves, as P6 mentioned: "I do not think I need anyone, right? I'm coming, right? I know more or less what you want [information], right? It is not necessary." Conversely, patients with certain needs (eg, difficulty in reading or understanding) consider the presence of another person to be essential.

Potentialities of Effective Communication

The patients described numerous potentialities of effective communication during the interviews. Many patients revealed that it was possible to clarify doubts with the pharmacist and increase their understanding of the correct use of medications. For example, P4 pointed out the following: "This last time I was there, they made a list, they talked about the pills, the schedules I had to take them and others, and that helped me a lot. As the other person says, I have a map. Because it is not a single medicine; there are some, and there are moments that we mix them up. Especially those who are already close to 80 [years old], right? Which is my case. Yeah, it gets confusing. And guidance helps a lot."

In addition to answering questions regarding medications, many patients emphasized the importance of the pharmacists' approach to physical activity and feeding. According to P6, "She informs, explains about the food—you cannot abuse, do you understand? When the tests results come, if the tests present high cholesterol level, altered sugar level, she explains what it's like to do, is not to do it and that . . . do you understand? Not to eat sugar, you have to do exercise, which is good. She explains everything."

The patients also considered communication with the pharmacist to help them in medication adherence. P10, for example, illustrated this fact by reporting that the pharmacists were careful enough to phone to remind him to use the medications: "I have blood pressure problem, and she demands that I take that medicine. There was a girl here— I do not know if it was in your area—she was supposed to call for me at 6 AM, 8 days, just to remind me to take the medication at home. So, it's the care that you have with the patient; sometimes you come to a place where there is not a care like this."

This study showed that the patients acquired awareness (self-efficacy) and autonomy (empowerment) to make decisions on their medications and health behavior. P2, for example, cited that, after the appointments, he developed a greater capacity to know how to act in certain situations: "Many things that I did not know and did not understand, after I came here, I began to understand. I did not even know what it was, how to act, how to do it. Now, before I take any action, I think more about . . . 'This has to be like this, cannot be like this, right?' Because they were the ones who explained it to me." The prevention of drug-therapy problems also was declared as a potentiality of effective communication: "The physician, he shows like this. [Patient shows the recipe.] So, we should take care of it ourselves at home. This means that I used to take the wrong medicine several times, and, after we started here, there is this sheet that I guide myself well by; we cannot do wrong things" (P7).

The patients also reported that, since cancer can destabilize them, the communication made it possible to cope with the disease: "I'll tell you something: it's a really bad disease, right? Nowadays, there is no medicine for that, right? And if you do not have some people informing us,

then we get more and more devastated every day, do you agree with me?" (P6). Thus, they consider the monthly consultation moments of relaxation and therapy as well as contribution to the treatment itself, as reported by P10: "If you do not have something to help, then it is difficult. This is therapy for me. I arrive, I talk to you—for me, it's therapy. I leave here serene."

Finally, the patients considered that the pharmacist–patient communication facilitated their interaction with other health professionals. P6 exemplified an important case: "She, and that other professional, the nutritionist—I forgot her name. I lost weight, you need to see. [. . .] And then, the nutritionist says to me, 'Who teaches, explains it to you?' I said 'A. [the patient informs the name of the pharmacist] of the pharmacy down there'." Therefore, considering all the potentialities shown above, P3 concluded that communication is essential and that it may be more effective than the medication/product itself: "You need to have communication, do you understand? Communication can sometimes be even more important than medication, sometimes. Because sometimes a word is better than a pill. I guess."

Points for Improvement

During the questioning regarding the suggestions for improved communication, the patients were satisfied with the approach method. However, one fact deserves attention. P3 stated relevant expectations about the communication process. He suggests the occurrence of periodic meetings between patients and pharmacists: "I, for example, think that we, patients, should have a day to get together and discuss how we are feeling or have a meeting. With them. It would be ideal, do you understand? So, I guess. Because I see some people here, but it's rare. So, I do not know what's going on with him, he does not know what's going on with me." Therefore, the exchange of information would not be restricted to between patients and pharmacists; these meetings stimulated the exchange among the patients themselves. As P3 added, this could help patients in both treatment and coping with the disease: "Because I think that it helps other patients. It does not have to be monthly, do you understand? Whether you like it or not, everyone will tell you what he is feeling, if he likes it or not. If it is patient and a pharmacist, there is a thing . . . It is good, it is great, but it is a restricted thing to both, do you know? So, I, for example, can have someone there who gives me some idea of anything I can do. Or, whatever, I can give him some idea."

Discussion

To the best of our knowledge, this is the first qualitative investigation to explore the perceptions of outpatients with prostate cancer concerning the communication process with the pharmacist in a community pharmacy. The quality of the clinical pharmacy service is not uniquely determined by the availability of the medication/product and technical knowledge of the pharmacist. This quality is closely related to the establishment of relationships between patients and pharmacists (11). The communication process is the pillar for the development of these human relationships with the aim of making people share feelings, information, and thoughts, and these messages are transmitted in diverse ways (12).

The process of interpersonal communication is intrinsically embedded in the actions of pharmacists; it is up to them to receive, interpret, and understand the meaning of messages transmitted by patients to build their interventions according to the patient needs, seeking their well-being, safety, and satisfaction (13). Hargie et al (14) showed some key skills for effective communication, including building rapport, explaining, questioning, listening, nonverbal communication, suggesting/advising, opening, closing, assertiveness, disclosing personal information, and persuading. Considering the exposed skills, it is possible to notice that many were mentioned in the interviews and were considered essential for effective communication with the pharmacist.

Cancer is considered one of the most feared diseases because it carries the idea of risk of death and the possibility of aggressive treatments that cause numerous adverse reactions (15,16). In our qualitative research, many patients presented feelings of anxiety, impotence, and fear, which confirm the need for effective communication. Considering this, pharmacists should present positive feelings to be close to the patient, which may aid in the acceptance and management of prostate cancer. Such feelings can be summed up as attention, affection, interest, warmth, and respect (17).

Patients even felt free to dialogue about sexual aspects of prostate cancer treatment. Since incontinence, infertility, feminization, erectile dysfunction, penile atrophy, and loss of libido are common adverse reactions during antiandrogen therapy (16), this delicate issue is difficult to address. Speer et al (18) declared that "by optimizing discussion of sexual functioning at appropriate moments during routine care, before problems develop or escalate, it may be possible to minimize distress, improve psychosexual outcomes, and reduce the need for specialist interventions as well as referrals to psychosexual support services outside the consultation" (P23).

Trust relationships are built by support, strength, and respect for the individualities and intimacies of patients, particularly at this time of fragility and difficulty with the disease (19). Thus, it is essential to look at the patient as a human being with particularized desires, fears, feelings, and expectations and not only as an individual with prostate cancer (20). From this fact, we see the importance of empathy during the communication process. Rogers and Stevens (21) highlight 3 attitudes of health professionals necessary for a trust relationship to occur: positive attention (ie, positive attitudes toward any patient behavior), congruence (ie, being authentic and coherent), and empathic understanding (ie, trying to feel what others are feeling and understand their

life history); thus, there will be greater opportunities to find alternatives to patient care (8).

The patients also noted the need for qualified listening. We recognize that dialogue is fundamental in human relations, and, through it, pharmacists can develop singular listening (19). Listening has a very broad meaning. It involves not just listening to what the patient is saying but allowing the patient to express his or her feelings, complaints, and needs, although they are not initially related to the treatment. Thus, it is possible to help the patient better understand his or her disease and correlate it with his or her life, avoiding a passive attitude regarding treatment and care (22).

All these aspects demonstrated that, in addition to verbal communication, nonverbal communication is required during the delivery of a clinical pharmacy service. Through nonverbal communication (ie, expressed by body language and voice intonation), it is possible to demonstrate feelings, revealing interest and attention to the individual with whom you are communicating. In this sense, our findings strengthen the assertion that the 2 types of communication skills complement each other (23,24).

Murad et al (5) state 2 pharmacist–patient interaction models, biomedical and patient centered, which differ by the level of patient engagement. The first model focuses on the treatment of the disease with little attention given to the role of psychological or social influence (patient playing a passive role). On the other hand, in the second model, the patient collaborates with the pharmacist to achieve the optimized outcomes of drug therapy. Thus, the second model (the one adopted by the FARMUSP) should permeate the pharmacist–patient relationship and is essential for a humanized health care. As mentioned by Lyra et al (8) the exchange of experiences mediates the process of letting "feelings flow," being vital for the construction of therapeutic relationships, confidentiality, and coresponsibility and the achievement of positive results.

The present study has some limitations. First, it was conducted only in a community pharmacy (an educational setting that always seeks to implement improvements in its work processes to increase quality of care) and used convenience sampling; therefore, we cannot ensure that patients' conclusions regarding the communication process would be the same in all pharmacies or hospitals. In addition, we included only patients with persistent or recurrent prostate cancer after surgery or radiation therapy, and our findings may not be generalizable to patients with prostate cancer at distinct stages of the disease.

Conclusion

This qualitative research hold that effective communication skills by pharmacist can help the patient to validate their concerns, develop a trusting patient–pharmacist relationship, address drug therapy problems, and lead to positive health outcomes. These skills allowed a humanized and patient-centered practice in which the patient is not only an individual with health problems but a human being with particularized needs. Knowledge about the role of communication in the care process for patients with prostate cancer is required to promote critical reflection by pharmacist on the potential consequences of their communication practices. To transition to patient-centered care, initially the pharmacist need encouragement, self-knowledge, and compassion. Thus, they can seek in themselves the source of affection, emotions, and values to support the important interactions with their patients and to assist them more effectively.

Authors' Note

Declaration of Conflicting Interests

Funding

ORCID iD

Patricia Melo Aguiar, PhD 🔴 http://orcid.org/0000-0002-3957-4533

References

1. Fitzmaurice C, Allen C, Barber RM, Barregard L, Bhutta ZA, Brenner H, et al. Global, regional, and national cancer incidence, mortality, years of life lost, years lived with disability, and disability-adjusted life-years for 32 cancer groups, 1990 to 2015: a systematic analysis for the Global Burden of Disease Study. JAMA Oncol. 2017;3:524-48.

2. Sierra MS, Soerjomataram I, Forman D. Prostate cancer burden in Central and South America. Cancer Epidemiol. 2016;44: S131-40.

3. Kehrer JP, Eberhart G, Wing M, Horon K. Pharmacy's role in a modern health continuum. Can Pharm J (Ott). 2013;146:321-4.

4. Colombo LRP, Aguiar PM, Lima TM, Storpirtis S. The effects of pharmacist interventions on adult outpatients with cancer: a systematic review. J Clin Pharm Ther. 2017;42:414-24. doi:10.1111/jcpt.12562.

5. Murad MS, Chatterley T, Guirguis LM. A meta-narrative review of recorded patient-pharmacist interactions: exploring biomedical or patient-centered communication? Res Social Adm Pharm. 2014;10:1-20.

6. Shoemaker SJ, Ramalho de Oliveira D, Alves M, Ekstrand M. The medication experience: preliminary evidence of its value for patient education and counseling on chronic medications. Patient Educ Couns. 2011;83:443-50.

7. Adler NE, Page AEK. Cancer Care for the Whole Patient: Meeting Psychosocial Health Needs. Washington, DC: National Academies Press; 2008.

8. Lyra DP Jr, Rocha CE, Abriata JP, Gimenes FR, Gonzalez MM, Pela IR. Influence of pharmaceutical care intervention and communication skills on the improvement of pharmacotherapeutic outcomes with elderly Brazilian outpatients. Patient Educ Couns. 2007;68:186-92.

9. Patton MQ. Qualitative Research & Evaluation Methods. 3rd ed. London, UK: Sage Publications; 2002.

10. Bardin L. *Content analysis*. Lisboa: Edições. 70; 2004.

11. Antunes LP, Gomes JJ, Cavaco AM. How pharmacist-patient communication determines pharmacy loyalty? Modeling relevant factors. Res Social Adm Pharm. 2015;11:560-70.

12. Pelicano-Romano J, Neves MR, Amado A, Cavaco AM. Do community pharmacists actively engage elderly patients in the dialogue? Results from pharmaceutical care consultations. Health Expect. 2015;18:1721-34.

13. Posey LM. Proving that pharmaceutical care makes a difference in community pharmacy. J Am Pharm Assoc (Wash). 2013;43:136-9.

14. Hargie OD, Morrow NC, Woodman C. Pharmacists' evaluation of key communication skills in practice. Patient Educ Couns. 2000;39:61-70.

15. Winterich JA, Grzywacz JG, Quandt SA, Clark PE, Miller DP, Acuña J, et al. Men's knowledge and beliefs about prostate cancer: education, race, and screening status. Ethn Dis. 2009; 19:199-203.

16. Donovan JL, Hamdy FC, Lane JA, Mason M, Metcalfe C, Walsh E, et al; ProtecT Study Group. Patient-reported outcomes after monitoring, surgery, or radiotherapy for prostate cancer. N Engl J Med. 2016;375:1425-37.

17. AlGhurair SA, Simpson SH, Guirguis LM. What elements of the patient–pharmacist relationship are associated with patient satisfaction? Patient Prefer Adherence. 2012;6:663-76.

18. Speer SA, Tucker SR, McPhillips R, Peters S. The clinical communication and information challenges associated with the psychosexual aspects of prostate cancer treatment. Soc Sci Med. 2017;185:17-26.

19. Rennó CSN, Campos CJG. Comunicação interpessoal: valorização pelo paciente oncológico em uma unidade de alta complexidade em oncologia [Interpersonal communication research: valorization of the oncological patient in a high complexity oncology unit]. Rev Bras Enferm. 2014;18: 106-15.

20. Salazar OAB. Humanized care: a relationship of familiarity and affectivity. Invest Educ Enferm, 2015;33:17-27.

21. Rogers CR, Stevens B. De pessoa para pessoa: o problema de ser humano—uma nova tendência na Psicologia [From Person to Person: The Problem of Being Human—A New Trend in Psychology]. São Paulo, Brazil: Livraria Pioneira; 1978.

22. Machado EP, Haddad JGV, Zoboli ELCP. A comunicação como tecnologia leve para humanizar a relação enfermeiro-usuário na Atenção Básica [Communication as light technology for humanizing nurse-patient relationship in basic assistance to health]. Revista Bioeth. 2010;4:447-52.

23. Roter DL, Frankel RM, Hall JA, Sluyter D. The expression of emotion through nonverbal behavior in medical visits. J Gen Intern Med. 2016;21:S28-34.

24. Knapp ML, Hall JA. Nonverbal Communication in Human Interaction. Belmont, CA: Wadsworth; 2005.

Author Biographies

Aline Scarabelin, was a pharmacist student at Faculty of Pharmaceutical Sciences, University of Sao Paulo, at the time this study was conducted.

Aline Santana Dosea, is a PhD student at Department of Pharmacy, Federal University of Sergipe.

Patricia Melo Aguiar, is a doctor professor at Faculty of Pharmaceutical Sciences, University of Sao Paulo.

Sílvia Storpirtis, is an associate professor of Faculty of Pharmaceutical Sciences, University of Sao Paulo.