ISCTE Business School
Instituto Universitário de Lisboa

TALK AND LET TALK - COMMUNICATION IS THE KEY:

PATIENTS' PERSPECTIVE ABOUT ONCOLOGIC CONSULTATIONS AND ITS IMPLICATIONS FOR QUALITY OF CANCER CARE

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Dissertation submitted as partial requirement for the conferral of
Master in Business Administration

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October 2019

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ACKNOWLEDGEMENTS

To Professor Susana M. Tavares, who spent hours with me on brainstorming sessions to improve this study and who has taught me to be resilient when performing research.

To ISCTE Business School, which gave an incredible experience as a student and allowed me to change both as a professional and as a person.

To my family and friends, who gave me emotional support and respected me every single time, particularly during last year.

To my masters' colleagues, who shared this experience with me, for all our meetings, support and encouragement. The ones who really understood my fears and anxieties.

To my work colleagues, who always knew how to incentive me to work on my thesis.

To T., for everything.

It was a long ride, in which I experienced so many different emotions. I am glad for all I have learnt, to have had the opportunity of merging two areas I love – healthcare and management - and to have given my best, even during the toughest moments.

ABSTRACT

Background: Quality of cancer care still needs improvement and one of its requirements is a patient-centered care, which englobes several dimensions, such as communication. Even though knowing its importance in cancer settings, and that it impacts both patients and doctors, there is still gaps on understanding patients' perspectives about oncologic consultations.

Aim: To obtain a deeper understanding about how patients evaluate their interactions with oncologists in consultations, using their cognitions and affective states as indicators of the quality of patient cancer care.

Method: We performed a descriptive qualitative study which allowed cancer patients to describe how they felt in oncologic consultations, their thoughts, and how communication occurs with doctors. To address these questions, we conducted semi-structured interviews with twenty-six patients.

Findings: We identified categories and subcategories which highlighted communication as a central piece of doctor-patient encounters. Then, we developed a model which englobes four dimensions of communication. The purpose was to describe patients' perspectives about each dimension and to help hospital managers to improve the quality of cancer care, by understanding patients' cognitions and affective states.

Conclusion: Communication is essential to cancer patients and it is not always valued by doctors neither adapted to patients' differences, such as gender ones. Considering patients' insights about their experience and interactions with oncologic doctors during consultations, communication skills training should be implemented not only in undergraduate programmes but also during all professional lifetime.

Keywords: quality of cancer care; patient-centered communication; patient-centered care; emotional health.

JEL Classification System: I1; M12

RESUMO

Literatura: A qualidade dos cuidados oncológicos requer melhorias e um dos requisitos é um cuidado centrado nos pacientes, que engloba dimensões como a comunicação. A sua importância na oncologia e o impacto para pacientes e médicos são reconhecidos, mas ainda há falhas na compreensão das perspetivas dos pacientes.

Objetivo: Pretende-se um conhecimento aprofundado da avaliação dos pacientes nas interações com os médicos oncologistas, através das suas cognições e estados afetivos como indicadores da qualidade dos cuidados.

Método: Realizámos um estudo qualitativo descritivo para que os pacientes oncológicos descrevessem como se sentem nas consultas oncológicas, os seus pensamentos e como a comunicação ocorre com os médicos. Como tal, conduzimos entrevistas semiestruturadas com vinte e seis pacientes.

Resultados: Identificámos categorias e subcategorias que enfatizaram a comunicação como peça central das interações médico-paciente. Seguidamente, desenvolvemos um modelo com quatro dimensões da comunicação. Este descreve as perspetivas dos doentes sobre cada dimensão e ajuda os hospitais a encontrar formas de melhorar a qualidade dos cuidados, ao perceber as cognições e estados afetivos dos pacientes.

Conclusão: A comunicação é essencial para os doentes oncológicos e nem sempre é valorizada pelos médicos nem adaptada às suas diferenças, como as de género. Considerando as opiniões dos pacientes sobre as suas experiências e interações com os oncologistas durante as consultas, as *skills* de comunicação devem ser ensinadas e implementadas em estudantes de medicina e durante toda a vida profissional.

Palavras-chave: qualidade dos cuidados oncológicos; comunicação centrada no paciente; cuidados centrados no paciente; saúde emocional.

ÍNDEX

I - INTRODUCTION

Nowadays cancer is a major health problem which is responsible for several morbidities and deaths (Chiew et al., 2018) being the second leading cause of death worldwide, according to the World Health Organization (WHO, 2018).

With the demographic changes that have been occurring in the developed countries (Ministério da Saúde, 2018), the world population is aging and cancer risk factors are more common, causing an increase in cancer incidence and mortality (Bray et al., 2018).

Oncologic diseases are one of the leading-causes of death in Europe, representing 25% of Portuguese deaths in 2017, according to the *Instituto Nacional de Estatística* (INE, 2019).

As new cancer cases increase, identifying the impact of oncological consultations on patients' cognitions, affect and coping behaviour and understanding how patients interpret the communication that is stablished in this context is essential to enhance the patient-centered quality of cancer care.

In the literature there is no clear consensus about the definition of quality of healthcare and quantitative methods and professionals' views on it are overrepresented compared to those of patients (Silva et al., 2013). But not only professionals and patients' perspectives can be different, as patients' satisfaction with healthcare seems to be associated with their own treatment compliance and even with better outcomes (Silva et al., 2013).

In fact, Chiew et al. (2018) stated that patient experience is an element of high-quality cancer care whose importance has been increasing. "It is becoming apparent that patient perception of the quality of care received and patient satisfaction is just as significant as disease outcome in assessing quality of cancer care" (Chiew et al., 2018: 7).

Therefore, it is important to analyse the quality of care received on oncological consultations from cancer patients' perspectives. This study aims to address this, contributing to the literature of quality of cancer care, regarding patient-centered communication (PCC), which is one of the specific dimensions of quality of patient-centered care (Blanch-Hartigan et al., 2016; Levit et al., 2013; McCormack et al., 2011; Tzelepis et al., 2015).

Patient-centered care involves taking into consideration "patient's perspective including their needs, preferences, values, experience and satisfaction" (Chiew et al., 2018: 6). It "focusses on the patient perception and views on the care or treatment received" (Chiew et al., 2018: 7). In this vein, PCC is a fundamental component of patient-centered cancer care.

PCC in cancer care may help patients to deal with difficult news, to cope with uncertainty, to manage the emotional impact of cancer and to comprehend medical information (Treiman et al., 2017).

Although literature is clear regarding the fundamental functions of PCC (Epstein & Street, 2007; Treiman et al., 2017), namely "exchanging information, making decisions, fostering healing relationships, enabling patient self-management, managing uncertainty, and responding to emotions" (Treiman et al., 2017: 94), enhancing trust in doctors, it is less clear on which are the PCC' characteristics valued by cancer patients in order to be effective and to reach these outcomes. Our study aims to fill this gap.

This is important since knowing which are the form, the content and the relational aspects that a PCC must have, so it can be considered of high quality, will provide specific guidelines concerning the competencies to be improved and trained by future oncologists, and the ones already practicing, helping the implementation of effective PCC and its monitoring in an oncological context.

Our study aims to explore patients' cognitions and the affective states that emerge in oncological consultations, the behavioural strategies that patients use in this context, and how communication occurs, either from the patient to the doctor and from the doctor to the patient. This will help us to understand patients' perspective of PCC in cancer settings, but also to provide important insights on how to improve it, enhancing the quality of patient-centered cancer care.

II- LITERATURE REVIEW

A- Patient-centered quality of cancer care

According to Chiew et al. (2018), quality of cancer care is a concept composed by twelve domains, divided into three groups. The first group, named "structure", includes the healthcare delivery system such as infrastructures, facilities and human resources; the access of patients to healthcare; and timeliness, since timings are determinant to treatments' success and can impact the distress in patients (Chiew et al., 2018).

The second group, "process", includes appropriateness of care and guideline adherence, as it seems that less compliance causes worst outcomes and overall survival; technical aspects such as the maintenance and quality of equipment and procedures; patient or carer/family experience and satisfaction; and a multidisciplinary and coordinated care, in which both professionals and patients collaborate with each other (Chiew et al., 2018).

In the "outcomes" group are the safety promotion and prevention of errors and adverse events, since most of the adverse events that cause deaths in hospitals could be preventable; disease-specific outcomes, such as survival, disease control and morbidity; and patient-centered outcomes, evaluating patients' perspectives about their own disease and treatments (Chiew et al., 2018).

Patient-centered care, which means to provide "care that is respectful of and responsive to individual patient, needs, values, and preferences and ensuring that patient values guide all clinical decisions" (Levit et al., 2013), should cause patients to be engaged in making decisions with their clinicians, who assume a PCC (Levit et al., 2013). Besides respecting patients' needs, values and preferences and assuming a communication centered in patients, health workers should be trained, competent and understand both patient and family, care should be based on scientific evidence, information technology should support and improve the quality of cancer care, new knowledge and strategies should be efficiently included in clinical practice and the health system should be provided to all patients (Chiew et al., 2018; Levit et al., 2013).

A high-quality cancer care has, according to the Institute of Medicine, a patient-centered care as its main domain, since they consider that patients should be the focus and be involved in healthcare systems to provide quality of care (Levit et al., 2013).

Patient-centered care is well stablished amongst worldwide healthcare systems and it can be defined as providing care to each patient, individually, respecting the patient, considering his/her perspectives, needs and preferences, supporting him/her and giving information, and inviting him/her to participate in the decision-making (Epstein & Street, 2011; Pelzang, 2010). In this concept, patients have more power in the decision making process since their perspectives are taking into account and they are respected and integrated in all decisions of their own disease (Pelzang, 2010). According to Pelzang (2010) and Tzelepis et al. (2015), the dimensions of this type of care are the respect for patients' values, preferences and expressed needs; a care that is coordinated and integrated; to provide information, communication and education; to deliver physical comfort; to give emotional support and alleviation of fear and anxiety; the involvement of family and friends.

To succeed in its implementation, health organizations should accomplish some requirements – leaders and directors should incentive and support the patient-centered care; a realistic strategic plan, vision and mission of the organization should consider how patient-centered care will be included in the organization routine; and patients should be part of the caring process (Pelzang, 2010).

Using patient reports is a useful tool to assess patient-centered care (Tzelepis et al., 2015).

B- Patient-centered communication

One of the essential components of a patient-centered care is effective communication between health providers and patients (Tzelepis et al., 2015). In fact, Mazor et al. (2012) stated that cancer patients have included communication problems and receiving insufficient information as indicators of deficiencies in patient-centered care.

According to Epstein & Street (2007), PCC includes three essential attributes of patient-centered care, namely, value patients' perspectives, needs and personal experiences, the strengthening of the relationship between patient and doctor, and the provision of opportunities for patients' participation in their own care.

An effective communication includes open questions to patients in order to understand their thoughts and feelings and affirming responses which transmits caring and safety to patients (Eide et al., 2004).

A PCC in cancer care increases trust between patients and healthcare providers and improves their relationship, enhances information sharing and its correct interpretation, gives meaning to patients' emotional needs, helps patients managing their uncertainty and keeping hope, helps patients to choose healthy habits, includes their points of view in decisions and supports them dealing with the emotional impact of cancer (Blanch-Hartigan et al., 2016; Epstein & Street, 2007).

As previously mentioned, the American National Cancer Institute grouped some of these purposes and gathered them into six main functions of PCC, namely, "exchanging information, making decisions, fostering healing relationships, enabling patient self-management, managing uncertainty and responding to emotions" (Epstein & Street, 2007; Treiman et al., 2017).

Doctors are often not conscious about what patients know and need or want to know and patients do not always show their needs, beliefs and preferences, so doctors have the role of asking patients and providing information (McCormack et al., 2011). Exchanging information results in a shared understanding of the involved parts as long as patients express their experiences and doubts and doctors adequate their communication style to patients' needs and preferences (McCormack et al., 2011). Even more, doctors reinforce information, provide it even if not asked and share other helpful information sources where patients can fulfill their information needs (McCormack et al., 2011).

The domain of making decisions implies, once again, the respect for patients' beliefs, values and culture, because patients face several choices and their decision includes active listening, partnership, support and involve the other (McCormack et al., 2011). Doctors give their reccomendations, based on scientific research (Treiman et al., 2017), and discuss potential consequences with patients, creating an action plan that is reviewed to assess the quality of the decisions they have made (McCormack et al., 2011).

Doctor-patient communication, centered in patients, is a communication in which people trust each other and understand and respect the roles of each party involved (Treiman et al., 2017). It implies honesty, trust, support, care and understanding (McCormack et al., 2011). Clinicians expose scientific evidence but, at the same time, support patients, who in turn, trust clinicians' knowledge and, if they do not agree with each other, they should discuss and negotiate each ones' perpectives (McCormack et al., 2011). A patient who does not trust in the clinician is related with missing appointments and does not adhere to them (McCormack et al., 2011).

Enabling patient self-management through communication means that patients have access to navigation assistance and to self-help resources, and their autonomy and participation in social networks are incentivated (McCormack et al., 2011). During the surveillance period, a plan is created so patients get self-care skills and problem-solving skills, when at their own homes (McCormack et al., 2011).

A PCC enables the management of uncertainty, through cognitive responses, which include "acknowledging, clarifying, and identifying the sources of uncertainty"; through affective responses, focused on emotions such as anxiety and distress caused by uncertainty; and through behavioural responses, in which information needs are acknowledged and strategies to deal with the problem are created (McCormack et al., 2011). Patients identify their uncertainties and doctors clarify (McCormack et al., 2011).

The domain of responding to emotions includes the identification and exploration of patients' emotions, so they can be understood and helped by clinicians (McCormack et al., 2011). This domain is often missed, as doctors do not always explore it neither understand or value patients' psychological disorders, which can negatively impact patients' treatments and quality of life (McCormack et al., 2011).

Doctor-patient interactions, either verbal or non-verbal, impact all medical process (Kafetsios et al., 2014). Patients have more trust (Steven et al., 2019), feel more satisfied, with better quality of life outcomes and less distress if an honest PCC is provided (Blanch-Hartigan et al., 2016).

Communication can improve physical health when doctors find the correct diagnosis and respective treatment plan, and it improves psychosocial health if patients feel better and hopeful after their encounters, either by verbal or non-verbal behaviours that influence patients (Street et al., 2009). Not so directly, communication can also affect health through some interaction effects that will influence it, for example, if the interaction improves patients' satisfaction with care and consequently they adhere more to treatments, which then will improve health outcomes (Street et al., 2009).

Doctor-patient interactions improve patients' access to care if doctors help them to get accurate health services and improve patients' satisfaction, participation, cope, trust in doctors and commitment to treatments when both listen to and understand each other' perspectives. A doctor who is honest, clear, interested and who listens to patients during their interactions improves the quality of the relation between patients, healthcare providers, friends and families, enhancing patients' emotional well-being and their ability to manage emotions and feel more control, less uncertainty and anxiety (Epstein & Street, 2007; Street et al., 2009). Social support is enhanced if the doctor not only shows that he/she supports patients but also if he/she suggests ways of improving it (Epstein & Street, 2007; Street et al., 2009). By letting patients participate in decisions, doctors increase patients' empowerment, which seems to improve emotional well-being and coping, and which improves the quality of decisions since each one gives their own opinions and the final decision is reached together (Epstein & Street, 2007; Street et al., 2009).

Some factors can also impact the relation between communication and health outcomes, such as demographic traits, personality traits, emotional states, relational factors, disease-related factors, social and cultural factors, and others, and deeply studies should be performed to understand how they impact that relation (Epstein & Street, 2007).

Doctors' emotional skills are important as well in doctor-patient interactions, as doctors' emotion regulation helps patient satisfaction (Kafetsios et al., 2014). Doctors who fail on doing it have more patients' complains, and the more anxious a doctor is, the bigger the probability of making medical errors (Kafetsios et al., 2014). If, in one way, an empathetic doctor receives more positive feedback and have more compliant patients, in another, distant doctors can negatively impact patients' psychological health and perceptions (Kafetsios et al., 2014).

During a first stage of receiving a diagnosis and planning treatments, effective communication between clinicians and patients can impact patients' emotions, attitudes and treatment decisions, increasing patients' trust and relationship with health providers (Coronado et al., 2017). Nevertheless, some studies found that communication fails, and patients report negative experiences during this phase, discouraging their involvement in the decision-making of their own disease (Coronado et al., 2017).

Communication is still significantly suboptimal to both patients (Levit et al., 2013; Steven et al., 2019; Tzelepis et al., 2015), and cancer survivors (Blanch-Hartigan et al., 2016). This last group face emotional challenges after they have treated their disease and they also need support and a PCC with healthcare providers to help them dealing with this new life chapter (Blanch-Hartigan et al., 2016).

Amongst patients, they are not always asked about what they prefer, they often do not have knowledge neither experience in the healthcare system to know the process and doctors do not have enough communication skills and do not recognise patients' verbal and non-verbal signals, which difficult communication even more (Levit et al., 2013).

Communication problems often start with patients, who receive a diagnosis with possible psychologic repercussions that prevent them from effectively talk, ask questions, express doubts and fears and from listen to doctors (Levit et al., 2013).

Secondly, clinicians' insensitivity to patients' health, lack of communication skills, not to adapt communication to patients' literacy, language or cultural barriers, not to recognize patients' emotional needs, to have a misconception of patients preferences and even lack of time can prejudice clinicians in providing a PCC (Levit et al., 2013).

Finally, the healthcare system can also be an obstacle to an effective communication, as sometimes patients deal with so many clinicians and procedures that it is harder to transmit information between everybody and keep up with all patients' process (Levit et al., 2013).

According to Furber et al. (2013), "there are clear indications that problems exist in terms of how well doctors and patients interact with each other and communicate information" (Furber et al., 2013: 654).

That is why we aimed to obtain a deeper understanding about how patients evaluate their interactions with their oncologist in consultations, using patients' cognitions and affective states as indicators of the quality of patient cancer care.

C- The cancer journey

People who are waiting for news about their health conditions, whether it is about waiting for results about medical tests and diagnosis, treatment results, or prognosis, live a difficult period which combines uncertainty (Sweeny & Cavanaugh, 2012) and lack of control (Howell & Sweeny, 2019; Sweeny, 2018). The process of waiting frequently causes even more anxiety than diagnoses and procedures themselves (Sweeny, 2012).

Feeling anxiety and worry are common and people react differently to uncertainty waiting periods, according to their disposition, social context and their own efforts to deal with the situation (Sweeny, 2018). "The importance, controllability, predictability, and chronicity of the circumstances" (Sweeny, 2012: 259) also impacts reactions to uncertainty (Sweeny, 2012).

Distress caused while waiting varies, depending on timing, since people show more distress levels at the beginning and in the end of the waiting period (Sweeny, 2018).

The first impact of receiving a cancer diagnosis

The first reaction when receiving a cancer diagnosis is often disbelief (Coronado et al., 2017; Mehta & Roth, 2015) and denial (Gorman, 2018; Mehta & Roth, 2015), which can occur from days to months (Mehta & Roth, 2015).

The cancer diagnosis can cause turmoil (Coronado et al., 2017; Zabora et al., 2001), fear (Zabora et al., 2001), shock, "confusion, sadness, anger, guilt and resignation" (Coronado et al., 2017:332) and it often has a bigger negative impact than other diseases (Gorman, 2018; Zabora et al., 2001). People remember for years the exact episode of receiving such unexpected news (Coronado et al., 2017) and if people already have psychosocial issues, it influences people's adaptation to the diagnosis (Zabora et al., 2001).

After diagnosis and during treatments

After being diagnosed with cancer, most people can create a productive course plan, even though mood changes and several emotional reactions are common (Gorman, 2018).

Feeling anxiety (Mehta & Roth, 2015; Zabora et al., 2001), irritability (Mehta & Roth, 2015), anger, sadness and depression (Zabora et al., 2001) are usual.

Distress in cancer, "a multifactorial unpleasant experience of a psychological (ie, cognitive, behavioural, emotional), social, spiritual, and/or physical nature that may interfere with the ability to cope effectively with cancer, its physical symptoms, and its treatment", according to NCCN (National Comprehensive Cancer Network, 2018: DIS-2), often operationalized as anxiety or depression, which are elements of distress (Zabora et al., 2001), is frequent in cancer patients (Acquati & Kayser, 2019; Giese-davis et al., 2012; Jacobsen, 2007; Mehta & Roth, 2015), even though prevalence rates are not certain (Giese-davis et al., 2012; Linden et al., 2012).

While anxiety is temporary, and can increase during treatments (Mehta & Roth, 2015), depression has a longer tendency in time and it is associated with personal traits (Linden et al., 2012).

Distress affects well-being and seems to decrease cancer patients' adherence to treatment, survival (Acquati & Kayser, 2019; Giese-davis et al., 2012; Jacobsen, 2007; Linden et al., 2012), quality of life (Giese-davis et al., 2012; Jacobsen, 2007) and even cause social, financial, cognitive, sexual and familiar complications (Giese-davis et al., 2012).

Inclusive, distress was considered the 6th vital sign in cancer care (Acquati & Kayser, 2019; Bultz et al., 2011; Bultz & Carlson, 2006; Giese-davis et al., 2012; Gil et al., 2012; Linden et al., 2012), besides temperature, respiration, heart rate, blood pressure and pain (Bultz et al., 2011; Bultz & Carlson, 2006; Gil et al., 2012), meaning that these are indicators of patient's state and cancer progress and should be monitored (Bultz & Carlson, 2006).

For these reasons, distress should be screened and people should receive appropriate treatment (Acquati & Kayser, 2019; Gil et al., 2012; Jacobsen, 2007), which in reality only happens in 31% to 63% of cancer patients (Acquati & Kayser, 2019).

Besides trying to understand prevalence rates in cancer population, it is important to understand some factors that seem to influence people's distress, namely "having more physical symptoms, perceiving the physician as being less helpful, having a psychiatric history, and having a pessimistic view of the world", "perceived lack of a personal support system, having an advanced illness, and viewing the physician as being unsupportive" (Gorman, 2018: 6).

For example, when considering the treatment with the radiotherapy itself, the fact that it is often an unknown process to people and that people learn that radiation is bad and burns the skin can cause anxiety (Gorman, 2018). Being alone in a room with a huge machine during treatments can be scary and causes a feeling of isolation, so patients should be demystified of it and its possible side effects (Gorman, 2018).

After treatments

The current success of cancer treatments is increasing cancer survivors and the time they live after being diagnosed, but physical and psychological repercussions of cancer may persist (Gorman, 2018). After all the process is completed, one of the aspects cancer survivors are most afraid of is a cancer recurrence (Gil et al., 2012; Gorman, 2018), that is, “the return of the disease after an initial course of treatment with a disease-free period” (Gorman, 2018: 10). Besides that, people often have to cope with limitations of treatment effects and possible late effects which can appear and are uncontrollable, causing anxiety and mood changes (Gorman, 2018).

A study concluded that people in general do not consider cancer as a chronic illness, which causes survivors to be expected to continue with their routine lives before cancer diagnosis and not to receive the support they used to, when being treated (Gorman, 2018). This lack of support with the decrease of medical appointments with the doctor (Gil et al., 2012; Mehta & Roth, 2015), who transmits security, and the decrease of quality of life, can increase emotional distress (Gil et al., 2012).

Depression is often common after cancer treatments, since people can be more conscious of the impact of the disease to all their life (Gil et al., 2012).

On another way, cancer survivors can feel closer to their family, create new priorities in life as helping others and being a volunteer, be quicker on accomplish their goals and make big life decisions (Gorman, 2018).

Recurrences

After a period without the disease, which is a time characterized by distress and fear of a recurrence, the return of cancer impacts the patient, creating less hope, pessimism and worry (Gorman, 2018).

People can blame themselves for past choices during the first cancer (Gorman, 2018).

Depression and anxiety are common, but it is not proved yet that distress increases in recurrences, when comparing with first diagnoses, and actually some people even feel less stressed the second time (Gorman, 2018).

People who have to go back to treatments are susceptible to remember the bad times they have spent there, the first time, disbelieving medicine and, more than this, even though it does not automatically mean that it is a terminal cancer, worries about death increase (Gorman, 2018).

D- The impact of oncology doctors on patients' emotional health

More than evaluate and treat the mental health of cancer patients through all phases (Martinez & Pasha, 2017), it should be of major interest to understand that emotions are frequent in health services and can be transferred through people by emotional contagion (Weilenmann et al., 2018), that is, "a tendency to automatically mimic and synchronize expressions, vocalizations, postures, and movements with those of another person's and, consequently, to converge emotionally" (Hatfield, Cacioppo & Rapson, 1994: 5), unconsciously (Hatfield et al., 2014). On another hand, emotional contagion also occurs through social comparison, at a conscious level, when people have the ability to understand their emotions and the others' emotions and consequently, express what appears adequate for the situation (Du et al., 2011; Hennig-thurau et al., 2006; Park et al., 2019). Emotional contagion is one of the components of the empathic process (Cunico et al., 2012; Hatfield et al., 2014), being that empathy is a skill that health professionals must have (Cunico et al., 2012). An empathic professional can cause patients to be more compliant and satisfied (Dehning et al., 2014; Gleichgerrcht & Decety, 2013), and it improves their relation (Gleichgerrcht & Decety, 2013). It is documented that even treatment outcomes can be influenced by the interaction between the patient and the health professional (Mercer & Reynolds, 2002; Cunico et al., 2012).

With this being said, health teams should be emotionally prepared to treat cancer patients, regulating their own emotions (Weilenmann et al., 2018) and providing an adequate care to treat such an impactful disease.

In health care services, it seems that having professionals who spread joy by using therapeutic techniques such as clown therapy improve patients' positive emotions and mood and health (Petitta & Naughton, 2015). Nonetheless, more research on how clinical outcomes and physician empathy are related are necessary since recent literature states that it is not well defined yet (Lelorain et al., 2018a) and, specifically, only one half of studies proved that physician empathy is positively related with the emotional quality of life of cancer patients because several factors can affect this relation (Lelorain et al., 2018b).

In fact, numerous studies have been conducted in order to understand how emotional states impact health, longevity and welfare. Emotions impact health in numerous ways and curiously, there are more literature about the negative ones than on positive ones, probably because these last ones are less differentiated (Kiecolt-Glaser et al., 2002).

If studies have been showing that well-being and positivity improves people's health and longevity, the controversy remains when evaluating its effect on people with a disease, specially diseases as cancer, since results supporting it seem unsatisfied (Diener & Chan, 2011). Although a positive emotional attitude can improve people's immune system and consequently their quality of life, it does not necessary mean that people will overcome their disease (Diener & Chan, 2011).

All supportive studies made relating cancer patients, emotions, psychosocial support, morbidity and mortality are mixed and even though some show a relation between them, they cannot be generalized since outcomes depend on the type of cancer and its stage (Diener & Chan, 2011).

In their long review, Diener & Chan (2011) found studies supporting the impact of well-being and positive and negative emotions on biological reactions.

For instance, supportive social relationships have shown to improve the immunological system and stressful close relationships deregulate it and cause negative emotions (Kiecolt-Glaser et al., 2002). Negative emotions prejudice the blood pressure and even improve the probability of getting infections or inflammations (Diener & Chan, 2011), which in turn is related to diseases as the cardiovascular ones, osteoporosis, diabetes and some types of cancer (Diener & Chan, 2011; Kiecolt-Glaser et al., 2002) and, when it becomes chronic, may cause death (Kiecolt-Glaser et al., 2002). A study found that inducting a depressed mood caused higher pain in chronic pain patients and another study found that inducting a positive mood helped people to a quicker cardiovascular recovery (Diener & Chan, 2011). Even though several experimental studies prove that emotions and well-being impact health physiological responses, more research is needed in order to understand better both the type of emotions and the consecutive responses to them, but previous results are promising (Diener & Chan, 2011).

III- METHOD

A- Participants

When specifying incidence and mortality rates by cancer type, worldwide, according to 2018 data, lung cancer is both the most diagnosed and mortal one in men and prostate cancer is the second most diagnosed and the fifth most mortal one. In women, breast cancer is both the most diagnosed and mortal one, worldwide, and cervical cancer the fourth most diagnosed and mortal one (Bray et al., 2018).

In Portugal, prostate cancer was the most common in men and breast cancer in women, and lung cancer the most mortal one, in 2010 (Direção Geral de Saúde, 2015).

Not only this incidence growth in Portugal is significant (Ministério da Saúde, 2018), as previsions point out that it will keep growing at least until 2035 (Direção Geral de Saúde, 2015).

We invited twenty-six oncologic patients to participate in our study. Participants were cancer patients who were currently being treated with radiotherapy in an oncologic service in Lisbon district.

The types of cancer included prostate (10 patients), breast (8 patients), head and neck (H&N) (3 patients), uterus (2 patients), lung (2 patients) and stomach (1 patient). All participants had a non-metastatic cancer. From the 26 participants, 2 were facing a cancer recurrence.

Fourteen participants were female (53,85%) and 12 were male (46,15%), ranging in age from 47 to 79 years old (M=65.8; SD=10.5). Participants had already had at least two consultations with their oncologist (M=4.5; SD=2.9).

Mean time of interviews was 7 minutes and 57 seconds (SD=3.11).

Sample demographic characteristics are represented in table 1. More details of each patient are in annex 1.

Table 1. Demographic characteristics of the sample

		Female	Male	Total
Gender		14	12	26
Mean age (years)		61.2 (SD=11.1)	70.6 (SD=7.6)	65.8 (SD=10.5)
Cancer type (number people)	Prostate	-	10	10
	Breast	8	0	8
	H&N	1	2	3
	Uterus	2	-	2
	Lung	2	0	2
	Stomach	1	0	1
Mean number consultations		5.2 (SD=3.4)	3.7 (SD=2.1)	4.5 (SD=2.9)

B- Data collection

To accomplish the purpose of this study we decided to perform a qualitative research. We collected data through semi-structured interviews to cancer patients, which are common in healthcare research, and which allows a better comprehension of what is being explored, compared to quantitative methods as questionnaires, as defended by Gill, Treasure and Chadwick (2008).

Interviews were performed after patients' daily radiotherapy treatment, in a doctor's office, and took place between 6th and 17th May 2019, in the oncology service. The clinical doctor provided all authorizations required. Potential candidates to participate in the study were recruited by radiation therapists from the service according to patients' availability, general health state and cancer stage.

Before starting the interview, it was explained that we would ask questions about the consultations with the oncologist. If the patient agreed to participate, an informed consent was signed, which included a guarantee of confidentiality and anonymity.

The questions of the interview were designed to focus on patients' emotions and cognitions elicited during medical consultations with their oncologist and their perception of doctors' emotions.

All interviews were audio recorded and the mean time of them was 7 minutes and 57 seconds (SD=3.11).

The interviewer started by asking:

How do you feel when you are in the office with your doctor during the oncology consultations? What are the things that come to your mind?

When you are at your oncology consultations, how does your doctor convey his/her emotions to you? How does he/she show his/her own emotions during the consultations?

The interviewer also asked participants to elaborate and explain their answers.

C- Data analysis procedures

The interviews were transcribed, and the transcriptions were reviewed for accuracy by the interviewer.

Our analysis followed stablished procedures for thematic analysis (Braun & Clarke, 2006). This type of analysis allows a more flexible and accessible approach which can be applied to different theoretical models since the themes created can be determined in different ways as long as the reflection is consistent, clear and accurate (Braun & Clarke, 2006).

Therefore, this was an inductive, data-driven thematic analysis, since coding and posteriorly, themes' identification, were done after the interviews. As described by Braun and Clarke (2006), the analysis of the interviews followed several steps, in order to find recurring information (Braun & Clarke, 2006) across participants' answers.

First, similar words or expressions mentioned by patients to describe their thoughts or emotions in the oncology consultations and the emotions conveyed by the doctor to the patient through the interviews were identified as common experiences and grouped.

Together, this originated initial codes, here named subcategories. Codes were compared to one another and grouped in order to stablish potential themes, here named categories.

All potential codes and the number of times people mentioned them and how many people mentioned them were inserted in an Excel file to easily compare and evaluate repetitive words or expressions. After this, codes were reviewed by a different person, independently, and so were themes.

Analysing data and creating codes and themes was a back and forward repeated process by two people until the final ones were achieved.

After achieving the subcategories and organizing them in categories, we organized these categories in order to understand how they relate to each other to explain the cognitive, affective and behavioural aspects of how patients lived their oncology consultations.

All categories and subcategories can be accessed in annex 2.

We display those relations in figure 1, in the *Findings* section.

From that analysis we identified that communication is an essential element to analyse the quality of care received by the patient in the oncology consultations, following the perspective of the patient. Therefore, we analysed our data taking that into consideration.

The information on the communication during oncology consultations was coded according to the direction of the communication from the doctor to the patient (table 2) and from the patient to the doctor (table 3). Moreover, we identified four dimensions of the communication regarding its form (how to communicate), its content (what to communicate); the relational aspects of the communication; and the affective communication that occurs during doctor-patient interactions on the oncology consultations.

IV- FINDINGS

After conducting all the interviews and creating categories and subcategories, we created the following scheme, based on interviews' answers, about what do patients feel in oncology consultations. (i_x) refers to the number of the interview from the quote.

Initial Incredibility/Shock

I would never imagine myself in an oncologic consultation, never! (i_7)

Ambivalence:

Expect the negative

I am always expecting him to say that something is not well. (i_{23})

Focus on the resolution

I am there to (...) be well. To solve my problem (...). (i_{21})

Affect felt:

- High activated negative affect: *I am always anxious to know what she will say about my problem.* (i_4)
- Suppression of emotions and thoughts: *No, no, I do not feel anything.* (i_{25})
- Low activated positive affect: *What does come to my mind? Calm.* (i_{14})

Uncertainty about:

- the diagnosis: *Initially I thought what I could have, right?* (i_{10})
- the disease/treatments: *When I think about the disease I think "Is it as the doctor says?"* (i_7)

Patients' strategies to reduce uncertainty

Passive

- Listen to the doctor: *(...) I am focus on what he has to say to me.* (i_5)
- Answer the questions: *He asks things, we answer.* (i_5)

Proactive

- Make questions: *I make questions about my disease, its state, its evolution, always asking questions.* (i_{22})

Figure 1. What patients think and/or feel during oncology consultations with their doctors.

Literature has shown that receiving a cancer diagnosis causes people to feel shocked and incredible (Coronado et al., 2017; Levit et al., 2013).

In this study, some participants have also mentioned it, as they did not imagine they would have cancer.

To feel these during an initial phase negatively impacts communication with doctors, as it can prevent patients from listening and understanding what oncologists are saying to them, which is often important information about the disease and treatments (Levit et al., 2013). Consequently, it may increase anxiety (Gorman, 2018; Levit et al., 2013). To reduce these emotional consequences, doctor communication in consultations is improved if information is also written, patients are encouraged to participate and to ask questions, and are accompanied by relatives (Gorman, 2018).

After the initial incredibility, the reactions of our participants differed. If some participants mentioned to expect the negative, some decided to focus on problem resolution. These two opposed strategies cause different consequences.

People who expect the worst or have negative thoughts about their disease and treatments have more difficult to normalize what is happening to them and to view cancer as a temporary problem (Gorman, 2018). Furthermore, negative expectations have been related with treatments' nocebo-related side effects, that is, consequences felt due to expectations and not due to treatments, which consequently cause low adherence to treatments (Heisig et al., 2016). For instance, a study about women with breast cancer undergoing endocrine therapy showed that before the treatment, women with the highest negative expectations about its side effects had about double side effects than the others (Nestoriuc et al., 2016). To control this, therapeutic strategies as psychological help and enhancing that possible side effects also mean that therapies are working, are useful (Nestoriuc et al., 2016). In the opposite, expecting the worst can prevent people from feeling so emotional disappointed when receiving bad news (Sweeny, 2012).

In another way, assuming the position of problem resolution is a positive reaction and can be improved by doctor-patient communication, empowering patients to manage their health, to access resources and to create goals (Epstein & Street, 2007; Street et al., 2009), which seems to improve emotional well-being (Street et al., 2009).

Some participants mentioned not to feel or think about anything. This coping strategy is an individual dispositional trait that has been study in cancer patients (Cohen, 2013) and it influences health, increasing unhealthy habits and distress in people and decreasing social empathy and support (Chapman et al., 2013; Cohen, 2013).

We also identified high-activated negative affect, such as anxiety, worry, apprehension and fear, and low-activated positive affect, as calm.

This distinction is a way of characterizing core affect in a two-dimensional perspective, composed by valence/pleasure (pleasure and displeasure) and arousal/energy (activation/desactivation) (Russell, 2003). While high arousal states induct action, the low ones indicate inaction (Russell, 2003).

Affective states as anxiety, fear, anger and worry happen during diagnosis and cancer treatments and impact patients' quality of life, so communication is essential, enabling doctors to diagnose those states and find solutions for them (Epstein & Street, 2007). However, clinicians rarely talk about emotions and patients not always expose the affect they felt (Epstein & Street, 2007). It is recommended an effective communication, which englobes legitimacy, validation, empathy and support (Epstein & Street, 2007).

Finally, we observed that some people mentioned feelings of uncertainty, whether about the diagnosis, the evolution of treatments and/or the disease and about the future. Curiously, managing uncertainty is one the dimensions of PCC (Blanch-Hartigan, 2016). As cancer' outcomes occur sooner than the outcomes of other diseases and cancer can be cured, feelings of uncertainty are common, causing distress and less sense of control (Epstein & Street, 2007).

Uncertainty is common since patients face a cancer diagnosis, and if it is difficult to avoid, it is easier to manage through doctors' communication and support, as helping patients to understand its inevitability, to keep positivity, to provide information, to give patients' power to vigil possible signals and to teach them emotional management' skills (Epstein & Street, 2007).

The participants of our study have mentioned two different types of strategies to deal with the uncertainty felt. If some use passive strategies, such as listen to the doctor or answer doctor's questions, others adopt a proactive approach, by making questions to his/her doctor.

To listen to the doctor is not always effective, as it seems that patients only keep in mind about 20% of what is said (Chua et al., 2018). Patients who only assume a passive strategy do not contribute to PCC, as it hides their needs, fears and choices and, consequently, they will not feel satisfied with the interaction (Epstein & Street, 2007). To improve the retention of information and even to clarify some misunderstandings, doctors ask patients to repeat the information they gave (Levit et al., 2013).

In another way, proactive strategies contribute to PCC because patients ask questions, give their opinion and show their needs and preferences, allowing doctors to better and easier understand them (Epstein & Street, 2007).

Communication’ dimensions

The communication between doctors and patients emerged from the interviews as an essential element to analyse the quality of care that patients received in the oncology consultations, from their own perspectives.

The analysis of the communication resulted in four dimensions that occur in two directions, from patients to doctors and from doctors to patients, as shown in tables 2 and 3, respectively, on the following pages.

The four dimensions that we distinguished were: the form (how to communicate), the content (what to communicate), the relational aspects, and affective experience during doctor-patient interactions. As it can be seen, the dimensions of the communication from patients to doctors, apart from the relational aspects, are already mentioned in figure 1, but in table 2 they were divided according to the four dimensions of communication found during our data collection.

The dimensions of the communication from doctors to patients, once again, are from patients’ perspectives in consultations with oncologic doctors, namely the form, the content, the relational aspects and the affective experience that doctors manifest to patients.

Literature has shown that communication between clinicians and patients, although essential in cancer care, still has flaws (Furber et al., 2013), it is still challenging (Levit et al., 2013) and patients and their families still complain about the information they receive (Epstein & Street, 2007).

Some of the participants of our study have mentioned that communication is important and, sometimes, it fails, as it is done in a hurry and/or it does not include deeper topics such as the familiar ones.

That doctor is always in a hurry. The first time I wanted to talk more, but she did not let me… (i_{18})

Table 2. Communication from patients to doctors in the oncologic consultations from patients' perspectives

Dimensions	Categories	Subcategories	Quotes
Form (how to communicate)	• Proactive communication	To make questions	*(…) Usually, I make questions about everything (…)*
	• Passive communication	To answer the questions To listen to the doctor	*He asks things, we answer.* *As a patient, I must listen to him.*
Content (what to communicate)	• Uncertainty about	-the diagnosis - the disease/treatment -the future (medical procedures, symptoms' anticipation)	*Initially I thought what I could have, right?* *The treatments kill us, and we think if it is worthy.* *There is always a doubt in our mind, that is what are the next steps.*
Relational aspects	• Emotional evaluation of the relation	Liking the doctor Having a close relationship	*He is someone I like a lot.* *We have a close relationship.*
Affective experience (felt)	• Incredibility, surprise, shock		*I would never imagine myself in this situation.*
	• To expect the negative		*I always think about the worst.*
	• High activation negative affect		*I always have anxiety (…)*
	• Emotions' suppression		*No, no, I do not feel anything.*
	• Low activation positive affect		*What does come to my mind? Calm.*

Table 3. Communication from doctors to patients in the oncologic consultations from patients' perspectives

Dimensions	Categories	Subcategories	Quotes
Form (how to communicate)	• Transmitting competency	-show competency -to explain/clarify -show professionalism -sharing the importance of timely actions	*The way she speaks we see she is someone who knows.* *She explained me what it was supposed to do.* *He is the most professional possible.* *She explained me what it was to do and, mainly, that the sooner the better and it was what we did.*
	• Open communication	-show authenticity/ honesty -to be frontal	*He always told me the true.* *I know I am consulted and faced with the reality.*
	• Active listening	-to make patients comfortable -to listen to patients doubts and fears	*She helps me to be comfortable to expose my doubts.* *He speaks, let me speak, listens to me.*
	• Communication failure	-speak and listen	*Sometimes we must talk about our own family issues, and this is something he never did.*
Content (what to communicate)	• To give information	-about the disease -exams' results -explain the treatments -to clarify patients' doubts	*I feel that she is really honest about the disease.* *When he told me what I had he gave me a certain hope.* *He says it is an innovative treatment with good results.* *If I have any doubt I ask again, and she explains it.*
	• To prepare patients for future planning	-next steps -possible results -possible symptoms -cancer evolution	*He makes me believe that the situation will be ok.* *I feel that she is interested in explaining me what can eventually happen.* *He gave me hope about the evolution of my case.*

Relational aspects	• Doctor as a pacifier: enhancing patients' personal resources	-to transmit and generate low activation positive affect in patients:	
		-calm	*He calms me down a lot.*
		-hope	*He gives me… a lot of hope.*
		-positivity	*I mean… we feel a certain positivity.*
		-to make feel better	*I feel that when I am with him, I am already feeling better.*
		-enhance feelings of control:	
		-to transmit security	*He makes me feel…I feel safer.*
		- to transmit trust	*I trust him, so whatever he tells me to do, I do.*
		-show support:	
		-to be available	*He is a doctor that sees me anytime, any day.*
		-to be worried	*She shows worry, willingness to help me.*
		-to show interest/care	*What I know is that he shows interest in solving my problem.*
Affective experience (manifested)	• To smile/good mood		*When we arrive, there is always a smile.*
	• To be nice		*My doctor is very nice.*
	• To be calm		*He is someone especially calm.*
	• To be cold		*He is cold. It seems like he is not even listening to me.*
	• To be distant		*He transmits me distance and I accept it.*
	• To be kind		*He is a really good person, I have a good opinion about him.*
	• Emotionless		*He does not show a lot of emotions. He is a little short with me.*

As already said, failures in communication can be due to several factors, such as clinicians not having communication skills to understand patients and their needs (Levit et al., 2013).

Some participants of our study mentioned coldness and emotionless as characteristics associated with their doctors. Some have said that being emotionless is correct, as medicals are being professionals, but others mentioned emotionless and coldness in a negative meaning. In fact, coldness in doctors seems to be related with less hope in patients and it is frequent when doctors deliver bad news (Epstein & Street, 2007).

> *It is his coldness. It seems like he is not paying attention to what I am saying.* (i_{25})

Besides this, our interviewees also mentioned doctors’ competency, professionalism, authenticity and honesty and doctors as communicators who give information and listen actively.

Open communication, when effective, has a positive impact on patients’ experience (Furber et al., 2013), and it is a characteristic of PCC (Pelzang, 2010). Clinicians have to involve patients, provide clear information, listen actively, give comfort and support them (Epstein & Street, 2007; Pelzang, 2010) and prepare patients for the future and discuss next steps (Epstein & Street, 2007).

Even though patients mention that they want to know everything about their disease, studies found that, sometimes, they are not ready and prefer to do not know about poor diagnosis (Furber et al., 2013). Even more, it seems that patients who mention doctor’s honesty as a good trait, not always receive total honesty from doctors and still consider them to be honest, and if doctors are honest about something patients are not prepared to listen, it actually compromises their relation (Furber et al., 2013).

Timing in cancer care is determinant to deliver the proper care (Chiew et al., 2018; Stevens et al., 2019), as delays can affect outcomes and cause emotional distress (Chiew et al., 2018) and some of our participants highlighted doctors’ reference to it.

> *To solve my problem as soon as possible!* (i_{21})

Doctors also have the role of being emotional pacifiers, with a containment function, who "absorb, filter or manage difficult or threatening emotions or ideas - the contained - so that they can be worked with" (French & Vince, 1999:9), enhancing the perceived control, trust and support.

Our participants have frequently mentioned that their doctor transmitted low activation positive affect, such as calm and hope, feelings of control, such as security and trust, and support perceptions, by being available, interested and worried with patients.

Some studies concluded that clinicians believe if they stay calm, they will calm patients down, even though this forces clinicians to regulate their emotions, which can have negative emotional repercussions (Weilenmann et al., 2018).

Transmitting hope interferes with honesty as patients want doctors to provide both. Patients want to know everything but at the same time they want to keep hope (Epstein & Street, 2007; Gilligan et al., 2017; McCormack et al., 2011; Steven et al., 2019), so clinicians are required to balance both.

The uncertainty of a disease such as cancer causes feelings of losing control over the disease, but PCC, in which knowledge is shared, decreases that feeling (Epstein & Street, 2007) and even controls stress caused by the disease and/or treatments (deLeeuw et al., 2014).

Finally, the communication behaviour of providing support that is centered in patients (Epstein & Street, 2007) is a dimension of patient-centered cancer care, according to the Institute of Medicine (Tzelepis et al., 2015). Support perceptions during cancer care, either from healthcare teams or family and friends impacts positively both mental and physical health of survivors (Mello et al., 2013).

Whatever patients' perceptions are, the impact of communication with doctors is evident. When correctly adapted to patients, it improves both physical and psychological health (Street et al., 2009).

Gender differences

Our final analyse was to see if there were gender differences concerning participants' perceptions about their oncologic consultations, since literature has been comparing them and has found discrepancies. All differences are seen in annex 3.

In our study, when comparing categories and subcategories which have more than two people difference who mentioned it, since having only one-person difference could not be significative, it is possible to observe the following.

Female gender mentioned more "incredibility, surprise, shock", "to make questions", "to transmit calm", "to transmit hope", "to transmit positivity", "to make feel better", "to be worried/interested", "timing importance", "to like the doctor" and "to have a close relationship".

Male gender mentioned more "uncertainty about the diagnosis", "fear", "emotions' suppression", "acceptance", "to listen the doctor", "to transmit trust", "to be available", to show professionalism", "emotionless" and "communication failure".

As the biggest differences, we can notice that, when using problem-focused strategies, females of our study mentioned more proactive strategies and males, passive ones. Females also reported more that doctors transmit them low activated emotional states than males did.

In general, some literature refers that females need to verbally express what they feel, tend to use emotion-focused strategies (Liddon et al., 2018), to ask more information than males (Bertakis et al., 2009), to use more psychosocial support and even though, to feel that they do not have their psychosocial needs met (Wessels et al., 2015). In fact, in our study, females were the only ones to mention relational aspects with doctors.

In another way, literature mentions that males want to solve their problems as quick as possible, use problem-focused strategies and do not seek so much for psychologic help, reporting that talking to psychologists is difficult (Liddon et al., 2018). In our study, males reported more fails in communication with doctors, some reported that doctors did not show emotions and focused more on doctors' professionalism, mentioning more that they trust in doctors and prefer to listen to them as a coping strategy.

Although several factors interfere with the communication between doctors and patients (Epstein & Street, 2007), it seems evident the effect of gender on it. For this reason, some studies defend that some parts of care, such as communication, support, type of consultation and treatment choices should be adapted by gender (Wessels et al., 2010).

V- DISCUSSION

A- Discussion and study contributions

The current research aimed to understand patients’ perspectives about their interactions with oncologic doctors in consultations, specifically what they think, what doctors transmit to them, and how communication occurs. Secondly, it aimed to understand potential differences between males and females’ perspectives about their experiences in oncologic consultations.

Consequently, we expected to understand how hospital management and human resources can contribute to a patient-centered care and communication in their healthcare oncologic services, helping to provide a quality cancer care.

It is expected that this study will have theorical, empirical and practical contributes to hospital management and specifically, to both managers and human resources team.

Through interviews to cancer patients currently being treated with radiotherapy, patients answered some questions, and, after an exhaustive analysis of the written transcriptions, answers were grouped and categories and subcategories about the theme were created.

Having patients’ perspectives about quality of care may contribute to help health entities improving their services, adding a wider knowledge about them and even improving outcomes, since patients will be more satisfied with the provided care (Silva et al., 2013).

Based on our findings, patients’ route during their cancer journey starts with an initial incredibility of a cancer diagnosis. Cancer is such an impactful word that some people do not even mention it (Gorman, 2018). A good example of it is one of the participants of our study, who call “the thing” to his cancer.

As literature has mentioned, initial feelings after a cancer diagnosis should be screened so they do not increase during the course of the disease and treatments (Coronado et al., 2017).

Symptoms of distress and anxiety are also common at this stage, and if not controlled, they may also last for months (Kiss & Meryn, 2001). Even though literature have more reports about these feelings in women, in our study we had the same number of male and female participants mentioning anxiety.

Next phases after diagnosis induce more affective states.

During the disease, each person has his/her own behaviour when dealing with the situation, which can be influenced by demographic characteristics and should be understood by health providers (Coronado et al., 2017).

If some participants expect the negative, others decide to focus on problem resolution.

When comparing with the literature, Silva et al. (2013) also found that patients refer the interpersonal aspects as essential in quality of care, such as having emotional support from doctors (Silva et al., 2013). Besides that, as a critic, same patients mentioned professionals' lack of time (Silva et al., 2013), which also is mentioned by participants in our study, who said that doctors are in "a hurry".

Both genders mentioned to feel high activated negative affect, but in other way, men tend to suppress emotions, more than women do, and women tend to feel that doctors transmit low activation positive affect to them. When feeling uncertainty, there are more females than males assuming proactive strategies to deal with it, and more males assuming passive ones.

In fact, literature has been shown that women value emotional support more than men did (Wessels et al., 2010), and as in some studies, we verify the biggest differences in patients' perspectives about oncologic consultations when comparing reports by gender.

The relevance of PCC in cancer settings made us look to our results to search for communication dimensions that emerged from patients' perspectives. Our study reached categories that compose four communicational dimensions in oncologic care, namely the form, the content, the relational aspects and the affective experience, from doctors to patients and from patients to doctors.

When analysing our dimensions with the core functions of PCC created by the IOM (McCormack et al., 2011; Treiman et al., 2017) and each of the domains and subdomains that McCormack et al. (2011) attributed to them, there are some similarities.

Exchanging information should include exploring patients' opinions, sharing information, providing available and trustful resources of information, and making an understandable conversation, in a way that patients will remember what was said (McCormack et al., 2011). Even though in our study we identify the subcategories of providing information to patients and listen to their doubts and fears, it was not possible to verify those points mentioned by McCormack, because our participants did not extend their answers.

The dimension of fostering healing relationships, which englobes discussing roles, having honesty and openness, trust in clinicians and express caring (McCormack et al., 2011), in general, are present in our dimensions. Even though none of our participants mentioned that doctors share responsibilities neither clinical decisions with them, which would increase patients' satisfaction (McCormack et al., 2011), they did mention doctors' honesty and an open communication, doctors' competency and professionalism and the transmission of trust, availability and caring, as aspects they value. These aspects seem to increase patients' adherence to treatments and the quality of doctor-patient relation (McCormack et al., 2011).

Managing uncertainty includes three domains, namely a cognitive, an affective and a behaviour one (McCormack et al., 2011). The first means to recognise and identify sources of uncertainty, the second is based on emotion-focused strategies and the last one is about problem-focused strategies (McCormack et al., 2011). In our study we identify the presence of uncertainty in patients, even though we did not asked patient if that uncertainty was acknowledged by doctors. Besides that, we verify that our patients used two types of problem-focused coping, that were proactive or passive strategies to deal with uncertainty. Once again, even though patients mentioned it, we do not know if they have discussed these uncertainties with their doctors. If discussed, together, doctor and patient can find ways of better dealing with it, as look for additional resources such as support groups (McCormack et al., 2011).

The function of recognizing and responding to emotions, includes to identify and to express emotions, to assess depression, anxiety and distress, to validate emotions, to express empathy and to provide help to deal with emotions (McCormack et al., 2011). In our study, patients reported feeling different types of affective affect, and anxiety. Emotions are rarely approached and, consequently, their diagnosis and validation are also missed, which can cause negative consequences (McCormack et al., 2011).

The core function of making decisions consists of, together, doctors and patients communicate, make choices, create an action plan and evaluate their choices (McCormack et al., 2011). Even though some participants of our study mentioned that they make questions, doctors clarify and provide information, we do not know to what extent options are discussed and decided together, or if it even happens.

Finally, the function of enabling patient self-management is about learning, sharing, planning, and preparing patients, which is important when patients are by themselves, could only be seen in our study when some patients mentioned that doctors helped them to prepare for future planning.

So, when comparing with the literature, even without validating that what our participants mentioned about oncologic consultations was discussed with their own doctors, we can see that those dimensions are meaningful to them, and so they constitute what PCC means to these patients.

Considering all the importance of communication in a quality cancer care, we have to notice that some of our participants still mention failures in communication. The most failures reported in the literature are patients' not being listened by doctors, and doctors not caring nor giving information about treatments (Levinson et al., 2010).

But, when effective, PCC has a positive impact on patients' compliance and satisfaction (de Leeuw et al., 2014).

B- Limitations and future research

Our study has some limitations. Considering our small sample, and that our data collection was done through data saturation, we may have excluded important information that more people could have said (Steven et al., 2019). Even though, we have tried to include people with different types of cancer, which happens few times in the existent literature (Epstein & Street, 2007).

Even more, our research was a qualitative one, which is subjective and depends on the view of the researchers (Steven et al., 2019). We did it so people could talk freely about whatever came to their mind about oncologic consultations. For this, our analysis should be cautious.

The fact that communication is always subjectively interpreted, by each person, and influenced by several factors who moderate the relation between communication and outcomes (Epstein & Street, 2007), makes it a challenge to define specific behaviours and apply them overall.

Taking that into account, when creating our communication' dimensions, we considered gender as a potential moderator, which in fact impacted differences in patients' perspectives.

So, despite our limitations, we provide important aspects about the doctor-patient communication, namely, the form, the content, relational aspects and the affective experience during those interactions.

But if one of the purposes of quality of care is to optimize PCC, we should not only understand patients' perspectives about consultations with doctors but also to find strategies which hospital managers and human resources can put in practice.

It is known that communication skills training is efficient (Gilligan et al., 2017) but future studies should make a deeper research on what are the communication behaviours that really improve quality of cancer care and how it is related with outcomes in cancer settings.

More than conclude that training clinicians is essential to improve PCC and, consequently, quality of cancer care, in the future it is important to take the best out of hospitals' available resources, to calculate costs with training, and to create a plan that can easily be adapted to everybody, everywhere, always with a patient-centered mindset, which values each patient.

C- Managerial implications

Even though all the improvements in quality of cancer care throughout the years, it still needs progress (Steven et al., 2019).

One of the needs of improvement is the psychological care in cancer patients, who frequently have psychological disorders and do not receive an accurate support, because they do not understand their own needs or doctors do not send them to psychologists (Steven et al., 2019). Providing this specific care to oncology patients, for instance, in their first day at the healthcare service, as defended by Steven et al. (2019), may help the control of mental disorders on these patients.

It is also essential to understand each patient and to keep in mind that, for future approaches, gender should be considered as a factor which cause differences in the way patients deal with their disease and how it affects their life.

Even when creating psychologic support, it is probably better to review and adapt it by gender, since men prefer solution-focused approaches and women emotion-focused ones (Liddon et al., 2018). This can be the reason why male patients do not seek for help, besides the cultural aspects that persist in our society, where men are still supposed to be mentally "stronger" than women (Liddon et al., 2018).

The communication between doctors and patients, when effective, contributes to reduce errors and to improve processes and resources (Steven et al., 2019).

When in consultation, the presence of patients' relatives could improve the interactions as they will be supporting patients and also retaining information (Steven et al., 2019).

If it is difficult for patients to verbally express what they feel, doctors should have skills to recognize it, since emotional health is important for patients' adaptation to the disease and one quarter of patients only speak about it if doctors ask them (Eide et al., 2004).

Training communication and acquire communication skills is essential to doctors, not only when delivering bad news (Karger et al., 2017; Steven et al., 2019), but also when making decisions, dealing with emotions and talk about sensitive themes such as prognoses and death (Karger et al., 2017). When applied to patients, doctors' communication skills increase patients' adherence to treatments, their satisfaction, emotional well-being and self-management, and some studies argue that it impacts outcomes in managing cancer (Levinson et al., 2010).

Implementing training communication programmes to medical students and a continuous training of clinicians is still a challenge, especially if they are not mandatory (Karger et al., 2017).

Programmes that teach communication skills require mentoring, practice and feedback and not only readings (Levinson et al., 2010). Role plays where doctors interpret both themselves and patients helps them to understand patients' perspectives (Levinson et al., 2010). Not only communication skills should be taught in undergraduate medical schools but also in a continued education after graduation and during professional life (Levinson et al., 2010).

Furthermore, doctors make an introspection about themselves and how emotions impact them when interacting with patients (Levinson et al., 2010).

Physicians should be prepared to deal with patients' strong reactions, to support them and to deliver information that patients understand (Gilligan et al., 2017).

D- Conclusions

Cancer is still a feared word and it is common for patients to have pre conceptions of the disease, which can prejudice the way they deal with theirs.

It is essential that hospital management recognizes the importance of doctor-patient interactions for high quality cancer care and implements ways of improving it, such as programmes of training communication skills, workshops, patient satisfaction surveys about aspects such as communication, doctors' incentives for communicational competency and annual evaluations and feedbacks to doctors (Levinson et al., 2010).

When interacting with patients, doctors must keep in mind that each patient has its own manner to deal with the disease and several factors can impact it. Gender differences are an example (Epstein & Street, 2007) and some studies argue that healthcare providers' support should be adapted to it (Liddon et al., 2018).

Even more, hospitals must keep in mind that burnout is common in healthcare providers and as there are the possibility of absorbing patients' affective states, interventions should be available for doctors to better deal with the repercussions of interpersonal relations at work in cancer settings (Petitta et al., 2017).

Through these actions, quality of cancer care is improved and the impact of the disease on patients, families and even doctors is more controlled.

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VII- ANNEXES

Annex 1- Sample characteristics.

Patient	Patology	Age	Gender	Doctor gender	Number Consultations	Interview time (min)
1	Prostate	77	Male	Male	3	7m33s
2	Breast	57	Female	Male	10	3m34s
3	Uterus	61	Female	Female	4	4m55s
4	Prostate	79	Male	Female	2	6m06s
5	Prostate	66	Male	Male	4	4m22s
6	Prostate	74	Male	Male	3	9m27s
7	Breast	77	Female	Male	10	8m10s
8	H&N	47	Female	Male	5	5m54s
9	Breast recurrence	72	Female	Female	2	6m14s
10	Prostate recurrence	78	Male	Male	3	5m25s
11	Prostate	77	Male	Male	2	8m26s
12	Lung	77	Female	Female	10	8m21s
13	Breast	53	Female	Female	6	6m41s
14	Prostate	59	Male	Male	3	10m34s
15	Breast	47	Female	Female	4	6m15s
16	Stomach	76	Female	Female	2	7m01s
17	Prostate	71	Male	Female	4	8m19s
18	Lung	56	Female	Female	3	7m42s
19	Breast	57	Female	Female	2	7m01s
20	H&N	55	Male	Female	3	5m13s
21	Breast	72	Female	Female	2	10m40s
22	Uterus	50	Female	Female	3	9m03s
23	H&N	67	Male	Female	10	19m37s
24	Prostate	73	Male	Male	3	6m22s
25	Prostate	71	Male	Male	4	11m42s
26	Breast	63	Female	Male	10	6m45s

Annex 2- All categories and subcategories with the number of people who mention it between parenthesis.

Patients’ cognitions, emotions and problem-focused coping in oncology consultations

- A: Uncertainty

- About the diagnosis (2 people)**:**

- 10 “Inicialmente pensava o que é que eu teria, não é?”

- 25 “(…) ele nunca me chegou a dizer o que é que eu tinha.”; “Eu hoje ainda não sei o que tenho.”; “Nunca me disse “Olhe, você tem um cancro.””

- About the disease and/or treatment evolution (3 people)**:**

- 7 “Olhe, eu quando estou a pensar na doença, penso assim “Será que é como o doutor diz?””

- 14 “(…) ele diz que é um tratamento inovador, que está a ter bons resultados. Portanto eu tenho de acreditar nele, não é? Mas pronto, se não der, olha, tentamos.”

- 17 “(…) os tratamentos dão cabo da gente e dá que pensar se vale a pena se não vale.”

- About the future (3 people)**:**

- 2 “(…) é tentar viver com a dúvida, sempre.”

- 3 “Mas há sempre uma dúvida na nossa cabeça, que é o passo que vou dar a seguir.”

- 10 “E naturalmente pensava “Como é que eu vou sair desta?””

- B: Emotions felt by patients

- 1. Incredibility, surprise, shock (initially) (4 people)**:**

- 7 “Eu nunca me vi nesta situação.”

- 9 “(…) não queria acreditar que me tinha vindo outra vez o problema (…).”

- 13 “Inicialmente estava surpreendida (…).”

- 19 “(…) nunca pensava que chegava aqui.”; “Sim, nunca me passava pela cabeça estar num gabinete de oncologia, nunca!”

- 2. To expect the negative (2 people)**:**

- 16 "O que me vem à cabeça é que as coisas são más."; "Penso sempre no pior, sim."

- 23 "Estou sempre à espera que ela me diga que alguma coisa não esteja bem."

- 3. High activation negative affect

- Anxiety (6 people)**:**

- 1 "(…) tenho sempre ansiedade."; "(…) até ter os resultados tenho uma ansiedade, porque não sei o que tenho."

- 2 "(…) sinto um bocado de ansiedade."

- 4 "(…) tenho aquela ansiedade para saber o que é que ela me vai dizer em relação ao meu problema."

- 12 "Penso, com ansiedade, aquilo que ele me vai dizer (…)."

- 15 "A primeira vez ia muito ansiosa, nervosa (…)."

- 23 "(…) muita ansiedade."

- **Worry** (1 person)**:**

- 8 "(…) tenho sempre uma certa preocupação porque isto não é uma doença fácil, não é?"

- Apprehension (1 person)**:**

- 13 "Inicialmente estava (…) um bocado apreensiva (…)."

- **Fear** (2 people)**:**

- 17 "(…) no início tive muito medo (…)."

- 23 "Mas estou sempre com medo que haja alguma coisa que (…)."; "Porque ao princípio estava com medo."

- 4. Emotions' supression (3 people)**:**

- 11 "Nada de especial."

- 24 "Não penso em nada (…)."

- 25 "não penso nada (…)"; "Não, não, não sinto nada."

- 5. Low activation positive affect

- Calmness (1 people)**:**

- 14 "O que me vem à cabeça? Olhe, calma."

- Hope (2 people)**:**

- 3 "Mas estou com esperança que vai correr bem."

- 4 "(…) ainda fico assim com um bocado de esperança e (…)."

- 6. Others

- Acceptance (2 people)**:**

- 6 "Eu aceitei, normalmente (…)."

- 6 "(…) encarei com otimismo, partindo do pressuposto que depois de fazermos os exames isto vai passar tudo e pronto."

- 7 "O que eu penso é que tudo corra bem (…)."

- 21 "(…) acredito e acho que vai tudo correr bem."

- 24 "(…) e aceito as coisas."; "Mas eu aceitei isso normalmente e a partir daí (…)."

- 25 "Espero que seja ficar bom, ficar em casa e que esteja tudo bem."

- Faith (religious) (1 person)**:**

- 9 "Para já eu também tenho fé, acredito que deus me vai, me está a ajudar."

- C: Problem-focused coping

- 1. Strategies to reduce uncertainty

- To make questions (proactive strategy) (4 people)**:**

- 1 "(…) à vontade para perguntar (…); "(…) sou persistente e pergunto (…).";

- 3 "(…) costumo fazer perguntas sobre tudo (…).";

- 7 "(…) vou-lhe perguntando e ele vai-me respondendo."

- 22 "(…) fazer perguntas sobre a minha doença, sobre o meu estado, como está a evoluir, sempre a fazer perguntas (…)."

- To answer the questions (passive strategy) (1 person)**:**

- 5 "(…) ele pergunta coisas, a gente responde."

- To listen to the doctor (passive strategy) (6 people)**:**

- 2 "(…) quero saber tudo, quero que ele me diga como está o processo a correr."

- 5 "(…) estou a pensar em estar concentrado no que o médico vai dizer."

- 11 "(…) estou como paciente, tenho de ouvir."

- 12 "Penso (…) aquilo que ele me vai dizer, (…) começando a falar e ouvindo (…)."

- 24 "(…) espero saber o que ele me diz (…)."

- 25 "(…) para auscultar o que é que eu tenho de fazer (…)."

- 2. To focus on problem resolution (1 person)**:**

- 21 "(…) estou ali para (…) ficar bem. Resolver o meu problema (...)."

Doctor as a transmitter of emotions, a container (enhancing perceived control, trust and support) and a communicator

- To transmit calm (10 people)**:**

- 1 "(…) dá sempre opiniões para o doente ficar mais tranquilo (…)."

- 2 "(…) ele é uma pessoa serena e transmite-me calma."; "Ele acalma-me imenso."

- 4 "Começo a ficar mais calmo porque venho sempre, sei lá, de ansiedade e tensão, mas depois começo a ficar mais calmo."; "Pronto, dá-me esta perspetiva, que eu fico realmente descansado."

- 5 "É uma pessoa assim muito calminha e transmite-me isso, transmite-me essa calma."

- 8 "Acalmei-me. Fiquei logo muito mais calma (…)."; "Acalma, e não é só a emoção. É a atitude deles, de irem ter comigo (…) isso tudo faz com que eu acalme, não é?"

- 9 "Ela deu-me a opinião, foi calma (…)."; "Transmitiu-me calma (…)."

- 12 "(…) ele transmite-me uma calma (…)."; "Mas gosto de… sentir-me a falar com ele, sinto-me mais calma (…)."

- 13 "(…) daí ela ter-me dado bastante tranquilidade (…)."; "(…) sempre me pôs muito tranquila (…)."; "(…) vim de lá mais tranquila (...).";

- 15 "Mas no primeiro contato com a médica ela foi logo muito… transmitiu-me calma (…)."

- 16 "Sinto-me mais tranquila e isso."

- Communication failure (speaking/listening) (8 people)**:**

- 1 "(…) ele também não é muito de falar."

- 5 "(…) as consultas são a despachar, mas isso é normal. Tem mais doentes para ver e não há tempo para muita conversa."

- 6 "(…) é de poucas conversas e eu, como sou uma pessoa que converso muito, sinto que devia haver mais diálogo."

- 7 "Ele até nem é muito, de muitas falas."

- 11 "(…) não é aquela pessoa de ter assim um diálogo…"; "Fiquei com uma má impressão na medida em que ele pouco falou comigo (…)."; "Ele não fala muito."; "(…) espero que ele seja mais dialogante de futuro."; "Às vezes temos de aprofundar a própria vida familiar, que é uma coisa que ele nunca fez."

- 18 "Essa médica, para mim, é a despachar. Eu até quis, a primeira vez, falar um bocadinho mais, mas não me deixou e despachou-me e eu não gostei."; "Claro, saí dali nervosa, tive de tomar os meus comprimidos para ficar mais calma, que fiquei alterada, e saí dali sem os comprimidos que eu precisava… aquilo não me serviu para nada, para nada."

- 24 "(…) não tenho grande contato com o médico, não há conversas de parte maior (…)."; "Como lhe digo nunca foram conversas muito profundas nem nada."

- 25 "(…) fiquei um bocado coiso, é que ele nunca me chegou a dizer o que é que eu tinha."; "Foi sempre dentro dessa base."; "O doutor daqui é que já me elucidou do coiso."; "(…) quando estive com ele, ele nunca me disse que eu vinha fazer este tratamento."

- To transmit trust (7 people)**:**

- 2 "(..) fui eu que o escolhi, é porque tenho confiança nele."; "(…) eu tenho confiança nele, portanto o que ele diz para fazer eu faço."

- 4 "(…) a gente olha e começa a falar e inspira confiança."; "(…) dá realmente muita confiança (…).".

- 5 "Se eu não tivesse confiança naquele médico tinha mudado."

- 6 "Eu tenho a máxima confiança no médico (…)."

- 15 “(…) também nos dá uma certa confiança, não é?”

- 17 “(…) comecei a tomar confiança outra vez na médica.”

- 24 “(…) tenho confiança nele, tenho confiança nele.”

- To transmit hope (9 people)**:**

- 6 “(…) sinto aquela esperança das coisas correrem pelo melhor. É aquilo que sinto na conversa que tive com ele, que tenho com ele.”

- 7 “Altera muito a minha esperança, ele dizer assim “A senhora não vai morrer disto.””; “Dá-me sempre mais esperança e gosto da maneira de ele falar (…).”

- 12 “É uma pessoa (…) dá uma certa esperança que isto corra o melhor possível.”; “(..) ele deu-me uma certa esperança (…) na evolução do caso (…).”; “Eu sinto que ele me incute, portanto, esperança (…).”

- 13 “Dá muita (…) e esperança.”

- 14 “Quando me falou do que tinha deu-me uma certa esperança (…).”; “(…) sempre me deu um bocadinho de esperança, não é?”

- 16 “(…) que as coisas vão correr bem (…).”; “Ajuda-me. Dá-me mais esperança. Fico tocada.”

- 19 “Sim, fiquei com esperança.”

- 22 “E faz-me acreditar que a situação vai correr bem.”

- 26 “Ele disse “tudo vai correr bem.”; “Senti, senti… esperança, fiquei mais alegre (…).”

- To transmit positivity (7 people)**:**

- 4 “De uma maneira geral, dá-me sempre mais positivismo.”; “Quer dizer, a gente sente ali um certo positivismo (…).”

- 7 “Olhe, transmite-me o bom, sinto-me bem.”; “Coisas boas, transmite sim senhora.”; “Saio de lá sempre com uma impressão boa.”; “Nunca vim de lá a chorar (…).”

- 12 “Sim, é uma pessoa muito positiva.”

- 15 “Ela foi muito positiva (…) nunca me disse uma palavra que me pudesse desencorajar (…).”

- 19 “(…) diz que é para pensar só positivo (…).”

- 21 "Ela é muito positiva, qualquer problema que eu ponha ela é uma pessoa que tenta sempre ver o lado positivo também."

- 23 "Desde que me começou a dar consultas ela tem sido (…) superpositiva."

- To transmit security (6 people)**:**

- 4 "(…) acho que começo a ganhar segurança no decorrer da conversa."; "(…) dá realmente muita (…) segurança, exatamente."

- 12 "É uma pessoa que explica as coisas e por isso dá uma certa segurança (…)."; "(…) ele deu-me uma certa (…) e segurança na evolução do caso (…)."; "(…) sentir-me a falar com ele, sinto-me mais (…) segura."

- 13 "(…) daí ela ter-me dado bastante (…) segurança."; "(…) não tenho nada a apontar. Dá muita segurança (…)."

- 20 "(…) transmitiu-me segurança, como se não fosse nada (…)."

- 23 "(…) é uma pessoa que transmite um pouco de segurança (…)."

- 26 "Ele faz com que eu me sinta mais… sinto-me mais segura."

- To be available (5 people)**:**

- 1 "(…) é um médico que nos atende a qualquer hora, a qualquer dia (…)."

- 6 "(…) disse para eu ir lá a qualquer terça-feira, fosse a que horas fosse dentro do horário em que ele está no hospital, que me consultava."

- 8 "Ele disse assim "Eu estou aqui para si" (…) Só o facto de nos dizerem isto, é uma coisa muito importante. É uma coisa que vale ouro."; "Eu tive uma situação muito complicada e tanto ele como toda a equipa correram imenso para me darem alta."

- 20 "Ela deixou-nos à vontade, responde aos nossos e-mails…"

- 23 "" Mas se houver alguma coisa eu estou aqui no meu gabinete, você vem ter comigo se houver alguma coisa." E já lá fui duas vezes."

- To explain/clarify (11 people)**:**

- 3 "Mas tenho tido uma médica que me tem explicado tudo (…)."; "Se tenho alguma dúvida pergunto novamente e ela explica-me."

- 5 "(…) explicou-me tudo bem explicadinho."

- 10 "(…) ele se mostra muito interessado (…) em explicar o que se passa (…)."

- 12 "É uma pessoa que explica as coisas (…)."

- 13 "(…) sempre foi muito esclarecedora (…)."

- 14 "(…) ele explicou-me isso bem."; "(…) ele explica as coisas todas (…)."

- 15 "Explicou-me logo o que era para fazer (…)."; "Explicou-me logo tudo na hora."

- 19 "E ela esteve-me a explicar (…)."

- 20 "Que a doutora (…) é esclarecedora (…)."

- 22 "Explica, explica tudo (…)."

- 23 "Ela explica-me tudo sem problema (…)."

- To smile/good mood (7 people)**:**

- 1 "(…) está sempre bem-disposto (…)."; "(…) ele é um médico (…) sempre com boa disposição."

- 4 "A gente chega, há sempre um sorriso (…) fica assim toda sorridente (…)."

- 10 "(…) revela da parte dele uma certa boa disposição (…)."

- 12 "(…) é uma pessoa que sorri (…).";

- 15 "Ela foi (…) muito alegre (…)."; "(…) ela própria é muito alegre e isso transmite-se (…)."

- 23 "Está sempre com um sorriso."

- 26 "Ele nunca, nunca… está sempre a rir, nunca está zangado. Está sempre sorridente (…)."

- To be nice (4 people)**:**

- 9 "Ela é muito simpática."

- 10 "É uma pessoa (…) muito simpática.".

- 12 "(…) sinto-me bem atendida e uma certa simpatia."

- 23 "(…) a doutora é muito simpática (…)."

- To show authenticity and honesty (7 people)**:**

- 1 "Transmite-me (emoções) sinceras."

- 4 "A gente vê que não está a dizer por estar a dizer. Quer dizer, a gente sente ali (…) verdade naquilo que está a dizer."

- 7 "Eu sinto que é verdadeiro."

- 12 "(…) e, portanto, fala francamente e eu gosto que seja assim."

- 13 "(…) sempre me contou a verdade (…)."

- 22 "(…) sinto que é muito sincera em relação à doença (…)."

- 23 "(…) o que ela está a dizer é o que é (…)."; "Aquilo que ela tem a dizer, diz."

- To make (patients) comfortable (5 people)**:**

- 3 "(…) é uma doutora espetacular, que nos põe à vontade."; "(…) eu andava aí mal e ela realmente pôs-me à vontade (…)."

- 7 "E ele, assim que eu estou na sala, transmite-me logo um à vontade."

- 8 "Ajuda a criarmos abertura para expormos as nossas dúvidas (…)."

- 20 "Que a doutora me deixa muito à vontade (…)."; "Mas ela deixou-nos à vontade (…)."

- 23 "(…) ela põe-me à vontade. E para falar já me sinto mais à vontade com ela, exponho-me de outra maneira."

- To be worried/interested (7 people)**:**

- 8 "O meu médico é muito paizinho."; "Só no dia em que me deu alta, não estava triste, estava assim stressadíssimo, a trabalhar a cem à hora para eu poder sair do hospital porque corria o risco de apanhar outra bactéria."

- 9 "(…) eu sinto que ela está preocupada a tentar explicar-me aquilo que eventualmente se pode passar."

- 10 "(…) o que eu sei é que ele se mostra muito interessado em tentar resolver o problema (…)."

- 12 "(…) fala… deixa-me falar, ouve-me (…)."

- 15 "E é interessada, mesmo após a cirurgia está-me sempre a mandar *whatsapp* a perguntar como eu estava, se estava melhor, sim."

- 19 "Ela mostra-se preocupada, com boa maneira de ajudar (…)."

- 21 "Sinto que ela é uma pessoa muito preocupada (…)."

- To show professionalism (2 people)**:**

- 5 "(…) está a ser o mais profissional possível.";

- 14 "Demonstra as coisas de uma maneira profissional (…)."

- To show competency (2 people)**:**

- 17 "Ela é uma mulher… como técnica é muito boa (…)."; "(…) a maneira como ela aborda os assuntos vê-se que é uma pessoa que sabe."

- 21 "Sinto que ela é uma pessoa (…) muito bem preparada, isso eu notei."

- To be frontal (6 people)**:**

- 1 "(…) sei que sou atendido e correspondido com a realidade."

- 12 "Ele é uma pessoa muito realista (…).; "(…) não diga as coisas com uma certa… fora da realidade."

- 14 "Pronto, diz as coisas, a realidade como ela é."

- 14 "Ele também fala pão, pão, queijo, queijo, como se costuma dizer, portanto é direto."

- 17 "Ela foi muito direta, quer dizer, não é daquelas pessoas que me esconde nem isto nem aquilo, é isto assim, assim, assim (…)."; "É fria e muito direta."; "(…) pode-se dizer as coisas, mas não sendo tão fria e direta como ela foi."; "(…) já sei que ela é direta, já vou à vontade, já não me assusta."; "(…) ela é muito fria, muito fria e muito direta (…)."

- 22 "(…) sinto que ela é muito sincera em relação à doença e às vezes é muito direta. Pronto, às vezes é bom subtilidade, ser subtil, mas é bom ser direta."

- To be calm (3 people)**:**

- 2 "(…) normalmente ele é uma pessoa serena (…)."

- 8 "É muito calmo."

- 24 "Ele é uma pessoa especialmente calma (…)."

- To make (patients) feel better (4 people)**:**

- 1 "Até porque numa situação destas, quando uma pessoa vai lá, parece que só o chegar ao pé dele, fica logo melhor."; "Eu sinto que conforme ele me está a atender, naquele momento sinto que estou a melhorar (…)."

- 3 "(…) faço o que ela me diz e sinto-me muito melhor."

- 9 "(…) ajuda-nos a enfrentar melhor aquilo que agora tenho estado a encarar."

- 26 "Ele disse "não fique triste, vai correr tudo bem. (…) Estava um bocado triste, mas fiquei mais alegre."

- To be cold (3 people)**:**

- 17 "É um bocado fria (…)."; "(…) pode-se dizer as coisas, mas não sendo tão fria (…)."; "(…) ela é muito fria (…)."; "Eu gostava que fosse mais doce."

- 22 "(…) é uma pessoa fria (…)."; "(…) apesar de ser fria transmite bondade (…)."

- 25 "(…) é mais a frieza dele. Parece que não está a ligar ao que a gente está a dizer (…)."

- To be distant (2 people)**:**

- 11 "Transmite-me essa distância e eu aceito essa distância. Ele é o médico, eu sou o paciente (…)."

- 18 "Senti (…) um afastamento."

- Emotionless (5 people)**:**

- 5 "Está a fazer uma coisa de trabalho, aquilo para ele é trabalho, não são emoções."; "Pelo menos o meu médico não mostra emoção. O ar dele é sempre o mesmo."

- 6 "(…) não é muito fácil para ele ter uma emoção."

- 11 "(…) ele não mostra grandes emoções. Ele é um bocadinho seco."

- 14 "Demonstra as coisas de uma maneira profissional, quer dizer, sem emoções."; "É evidente que não podem deixar transparecer as emoções, acho eu."

- 20 "(Emoções)… neutra, é mais neutra, o que eu acho que é bom também."

- To like the doctor (2 people)**:**

- 3 "(…) não tenho assim grande afinidade com a doutora, mas que gosto dela, gosto."

- 12 "(…) é uma pessoa de quem gosto muito."

- To have a close relationship (with patients) (2 people)**:**

- 2 "Tenho uma relação com ele mais próxima."

- 8 "Então temos uma relação muito pessoal, muito direta."

- To be kind (2 people)**:**

- 22 "(…) transmite bondade (…)"

- 24 "(…) muito boa pessoa, tenho boa impressão dele."

- To give advice (1 person)**:**

- 1 "Mas de qualquer maneira aconselha-me sempre para o bem e para o meu benefício, não é?".

- To do not transmit confidence (1 person)**:**

- 18 "(…) não me transmite a confiança que devia transmitir, eu não sinto aquela confiança."

- To appeal to religion (1 person)**:**

- 26 "Perguntou-me se eu era católica e eu disse que sou e ele disse que também é católico."

- To show partnership (1 person)**:**

- 26 "Ele disse "não tem problema, vamos superar isso tudo.""

- "Timing" importance (4 people)**:**

- 9 "Portanto, ela passou-me o mais urgente possível para eu fazer estes tratamentos."

- 13 "Tudo se resolve, tem o seu timing, o seu caso não é urgente, na altura certa."

- 15 "Explicou-me logo o que era para fazer e, principalmente, que quanto mais rápido melhor e foi isso que fizemos."; "A preocupação dela foi sempre, sei lá, fazer os exames o mais rápido possível (…)."; "Explicou-me logo tudo na hora."; "Mas sim, ela foi muito rápida (…)."

- 21 "Resolver o meu problema o mais rapidamente possível."

- The importance of communication (4 people)**:**

- 4 "A gente chega (…) a conversa logo (…) isso facilita tudo."

- 8 "Não é nada que depois de uma boa conversa não passe."; "(…) ou conversem comigo… isso tudo faz com que eu me acalme, não é?"

- 12 "O sentir-me a falar com ele, sinto-me mais calma, mais segura."

- 23 "(…) então conversamos um bocado (…)"; "Ela conversa, conversa, conversa (…)."; "quando entrei, conversei, conversei, "como é que passou a semana, como não passou, está melhor, não está melhor…", aquela maneira de falar que uma pessoa fica um pouco melhor."

Annex 3- Gender differences verified on patients’ answers.

	Category (level 1)	Subcategory (level 2)	Subcategory (level 3)	Total ♀	Total ♂	Total
Patients’ cognitions, emotions and problem focused coping in oncology consultations	Cognitive uncertainty (about…)	-the diagnosis		0	2	2
		-the disease and/or treatment evolution		1	2	3
		-the future		2	1	3
	Emotions felt by patients	Incredibility, surprise, shock		4	0	4
		To expect the negative		1	1	2
		High activation negative affect	-Anxiety	3	3	6
			-Worry	1	0	1
			-Apprehension	1	0	1
			-Fear	0	2	2
		Emotions’ suppression		0	3	3
		Low activation positive affect	-Calm	0	1	1
			-Hope	1	1	2
		Others	-Acceptance	0	2	2
			-Faith	1	0	1
	Problem-focused coping	Proactive strategy to reduce uncertainty	-To make questions	3	1	4
		Passive strategies to reduce uncertainty	-To answer	0	1	1
			-To listen the doctor	2	4	6
		To focus on problem resolution		1	0	1

	(level 1)	**(level 2)**	**Total ♀**	**Total ♂**	**Total**
Doctor as a transmitter of emotions, a container and a communicator	Low activation positive affect	To transmit calm	7	3	10
		To transmit hope	7	2	9
		To transmit positivity	5	2	7
		To make (patients) comfortable	3	2	5
		To make (patients) feel better	3	1	4
	Control feelings	To transmit security	3	3	6
		To transmit trust	2	5	7
		(To do not transmit trust)	1	0	1
	Support perceptions (being care)	To be available	1	4	5
		To be worried/interested	5	1	6
		To explain/clarify	6	5	11
	Doctor's competency	To show professionalism	0	2	2
		To show competency	1	1	2
		"Timing" importance	4	0	4
	Doctor's traits	To smile/good mood	3	4	7
		To be nice	2	2	4
		To be calm	2	1	3
		To be cold	1	2	3
		To be distant	1	1	2
		Emotionless	0	5	5
		To be kind	1	1	2
	Relationship	To like the doctor	2	0	2
		To have a close relationship (with patients)	2	0	2
	To appeal	to religion	1	0	1
		to partnership	1	0	1

The communication	Its importance	2	2	4
	To show authenticity and honesty	4	3	7
	To be frontal	2	3	5
	To give advice	0	1	1
	Communication failure (speak and listen)	2	6	8