

Chronic Illnesses, Vulnerability, and Uncertainty: How Do Recent Challenges Impact on Patient-Centered Medicine?

Eugenia Cao di San Marco, Unit of Clinical Psychology, Santi Paolo and Carlo Hospital, Italy

Elena Vegni, Unit of Clinical Psychology, Santi Paolo and Carlo Hospital, Italy & Department of Health Sciences, University of Milan, Italy

Lidia Borghi, University of Milan, Italy

 <https://orcid.org/0000-0001-9581-9921>

ABSTRACT

The goal of this chapter is to describe some of the recent challenges that modern medicine is facing using patient-centered medicine as a theoretical frame of reference. First, the work will describe the origin, the development, and the main implications of patient-centered medicine (PCM). Then, it will address the critical increase of chronic illnesses and how PCM could be the best-suited theoretical framework for enhancing patient engagement and coping with chronicity. Additionally, it will address the difficulties raised by increased uncertainty in medical practice, especially from the physicians' point of view. Finally, a relationship-centered care (RCC) will be proposed as a more effective theoretical perspective than PCM to deal with uncertainty and its impact on the patients' and physicians' inner life.

KEYWORDS

Chronic Illnesses, Inner-Life, Multimorbidity, Patient-Centered Medicine, Patient-Physician Relationship, Relationship-Centered Care, Shared Mind, Uncertainty, Vulnerability

INTRODUCTION

The medical world is always evolving and readjusting. New knowledge and technologies, new illnesses, and new patient-physician dynamics lead to new critical issues and challenges. The terms “patient-centered care” have been around since the 1950s, but after the Affordable Care Act was adopted in the United States, a patient-centered approach began to be implemented on a wider scale to deal with some of the present day healthcare challenges, such as the refocused attention on patient outcomes and the attempt to cut healthcare costs. Patients become the center of care, not only from a biological reductionist point of view, but also from social and psychological perspectives. Taking into account patients' feelings, thoughts, and expectations about their clinical conditions has helped

DOI: 10.4018/IJPC.H.2019010104

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

to create a more efficient healthcare system and higher patient satisfaction. Patient-centered medicine (PCM) has proven useful, especially in dealing with chronic disorders, by focusing on exploring the patient's illness experience. PCM highlights the crucial role of doctor-patient communications and involves patients in the clinical consultation and in the care process, thus opening the road to patient engagement as a key factor for optimal treatment adherence and clinical outcome.

However, PCM appears to not be enough when dealing with other new challenges in modern medicine, which includes the ever-growing uncertainty in clinical practice and the consequent physician and patient vulnerability. In the view of the authors, there is the need to address uncertainty and vulnerability, considering the existence of at least two actors playing in a healthcare context, in a communicative, relational, dynamic exchange. The authors, therefore, propose a new theoretical frame of reference that includes PCM, but also takes into account the whole patient-physician relationship as a tool to protect both the patients and the physicians. The authors term this "relationship-centered care" (RCC) or relationship-centered medicine (RCM). The patient-physician relationship is the key element to improve patient care quality because it allows the assessment of the most suited communicative approach for that patient.

To support this view, the authors will first describe the PCM frame of reference. Then, they will address the challenges that medicine is facing today, such as increasing chronic illnesses and the ever-growing uncertainty in clinical practice. Finally, the authors will describe the main characteristics of the relationship-centered medicine and its benefits.

BACKGROUND

Patient-centered medicine is, above all, a revolution in medicine, a method that changes the way of practicing medicine, how physicians relate and communicate with their patients during medical consultations, and also the roles of the other actors within the visit, such as family members and other healthcare professionals. This way of relating to a patient has its roots in the theoretical thinking of two British psychoanalysts, Michael Balint, and his wife, Edin, who coined the term "patient-centered medicine" in 1969.

There is another way of medical thinking, which we call 'patient-centered medicine.' Here, in addition to trying to discover a localizable illness or illnesses, the doctor also has to examine the whole person in order to form what we call an 'overall diagnosis.' This should include everything the doctor knows and understands about his patient; the patient, in fact, has to be understood as a unique human being (Balint, 1969).

The development of this method should be viewed in light of an epistemological change of paradigm, which shifted the science of medicine from the biomedical model to a bio-psychosocial paradigm. These changes in medical epistemology have a significant impact on the clinical method moving from a disease-centered to a patient-centered perspective. The biomedical model was based on a biological reductionist approach. That is, patients were read as the expression of disease processes and the clinical method focuses on identifying standard disease entities and numeric entities and, on this basis, proposes an evidence-based treatment. This is the reason why this paradigm is called "doctor-centered medicine" or "disease-centered medicine" (DCM). This clinical method was simple, clear, verifiable, and allowed for the formulation of diagnostic hypotheses and prognosis (McWhinney, 1989, 1993). Nevertheless, it has been criticized for oversimplifying the problems of illness; assuming that disease is fully accounted for by deviations from the norm of measurable, biological variables and not taking into account the patient's perspective.

On the contrary, according to the bio-psychosocial paradigm, PCM focuses on every single patient as a person; every patient has a story that demonstrates the interactions among the biological, psychological, and social components of his or her life (Engel, 1977, 1981). Moreover, PCM gives clinicians a more complex goal; it integrates the traditional understanding of disease with each patient's point of view on his/her condition, moving the objective from curing the disease to caring

for the person. As Kleinman (1989) stated, beyond the dimension of the “disease,” intended as the doctor’s understanding of the biomedical disorders, there is the “illness,” which refers to the patient’s subjective experience of feeling sick.

PCM extends the focus of medicine also to the non-biological aspects of the disease; even personal, psychological, and social aspects are recognized as current and important so that the tasks of the consultation are focusing not only on disease, but also on the “patient’s agenda,” which is made up of the patient’s personal illness experience, which may be broken down into four main factors: the patient’s feelings, his/her ideas about the illness, the impact of his/her problems on his/her life, his/her expectations about what should be done, and the patient’s desires (Moja & Vegni, 2000). A clinical consultation that is patient-centered elicits and explores patients’ expectations, feelings, and illness beliefs, and tries to activate the patient to take some control in the medical visit (Platt et al., 2001).

Ample literature has found associations between the patient-centered model of communication and patient satisfaction (Kinmonth, Woodcock, Griffin, Spiegel, & Campbell, 1998; Kinnersley, Stott, Peters, & Harvey, 1999; McMillan et al., 2013; Rathert, Wyrwich, & Boren, 2013), Rosenberg, Lussier, & Beaudoin, 1997; Williams, Weinman, & Dale, 1998; treatment adherence (Rosenberg et al., 1997; Safran et al., 1998; Street, Makoul, Arora, & Epstein, 2009), medical outcomes (Arora, 2003; Ekman et al., 2012; Kaplan, Greenfield, & Ware, 1989; Maisiak, Austin, West, & Heck, 1996; Rao, Weinberger, & Kroenke, 2000; Rosenberg et al., 1997; Robinson, Callister, Berry, & Dearing, 2008), and decreased rates of malpractice claims (Levinson, Roter, Mullooly, Dull, & Frankel, 1997). Furthermore, clinician failure to elicit and discuss patient expectations predicts dissatisfaction with the visit and the persistence of symptoms (Jackson, Kroenke, & Chamberlin, 1999; Kravitz, Callahan, Azari, Antonius, & Lewis, 1997). To summarize, PCM is a theoretical perspective that promotes effective and efficient clinical care.

In conclusion, the factors that have bolstered the shift from DCM towards PCM are not only cultural and epistemological changes, but also practical needs, such as the attempt to reach a high-quality healthcare system and the urgency to cut costs. Among these practical needs, there is also the demand to cope with the increase in prevalence and incidence of chronic illnesses, which is difficult to manage for both the patients and the whole healthcare system. PCM appears to be the right perspective to deal with these challenges.

CHRONIC ILLNESSES AND MULTIMORBIDITY

Chronic conditions are defined as illnesses that last longer than three months and are not self-limiting. Common examples of chronic conditions are diabetes, asthma, congestive heart failure, stroke, low back pain, and arthritis. Most of these diseases have major physical, psychological, social, and financial consequences, and impact the lives of individuals and their families in many ways. From a societal perspective, chronic diseases are a major source of healthcare utilization (Vlieland, 2002). Data from a US report stated that nearly half of the adult population is affected by chronic conditions, with one-fourth of all adults experiencing multiple (two or more) chronic conditions (Ward, 2013). In the US population, heart failure has increased from 5.7 million to 6.5 million in recent years (Benjamin et al., 2017). Other studies projecting the prevalence of chronic conditions in upcoming years estimate an increase of diabetes by more than 80%, of Parkinson’s disease by 30%, and Alzheimer’s is projected to increase by 40%. The National Cancer Institute projects that by 2020 there will be 30% more cancer survivors than there was in 2010 (Dall et al., 2013).

There are two primary reasons why chronic conditions are increasing, which are connected to one another: technology development and aging of the population. New medical technologies allow people to survive longer with medical conditions that were life ending in the past, and this is one of the reasons why there is a general rise in the population’s age in all of the developing countries (Beaglehole et al., 2008; Wiederhold, Riva, & Graffigna, 2013). For example, the specialized pediatric intensive care unit care (PICU), on one hand, has contributed to the improved survival rates of

critically ill children, but, on the other hand, may have exchanged mortality for morbidity over the last several decades, with a prevalence of new morbidity that is 4.8%, twice the mortality rate (Pollack et al., 2014). In most cases, the transition from childhood/adolescent care to adult care is guaranteed.

Furthermore, chronic medical conditions are often comorbid with other medical and/or psychopathological disorder(s); it has been demonstrated that over 50% of depressed patients show multiple chronic medical conditions as well (Wells, Rogers, Burnam, Greenfield, & Ware Jr., 1991), with additional consequences for healthcare services and primary care providers for costs, treatment planning, and outcome. Multi-morbidity has been defined as the “most common chronic condition,” and its prevalence progressively increases with age, affecting more than 60% of people aged 65 or older (Barnett et al., 2012). These conditions result in numerous adverse health outcomes, increased healthcare needs, and subsequently higher medical costs, with estimates of increasing costs by at least 45% for each person with chronic physical disease and a co-morbid mental health problem (Naylor et al., 2012).

The increase of chronic disease and multimorbidity is one of the biggest new challenges to the traditional health system and the doctor-patient relationship. The disease-centered paradigm was not able to deal with the complexity brought by chronicity and multimorbidity. Chronic illnesses cannot be cured once and for all, and their treatment cannot be based only on standard, numeric, biological parameters; it needs cooperation and self-care competencies from the patient. The PCM paradigm is an efficient approach in dealing with those conditions because it offers a complete and long-term patient-care perspective. Moreover, PCM opens to the inclusion of patient-reported outcomes (PROs) in the assessment of the care process, such as the perceived health status or the health-related quality of life (Kingsley & Patel, 2017), which can help the physician in the biopsychosocial reading of the patient.

Thanks to this epistemological, methodological, and clinical revolution, patients have taken a more and more active role in their healthcare process. The importance of patient involvement resulted in the study of patient engagement (PE). There is no shared consensus on the definition of patient engagement, but the general knowledge implies that it is related to the importance of taking an active role in one’s health, having knowledge, skills, and confidence to manage health/chronic conditions, and performing health-promoting behaviors. Patient engagement is a key element, especially in chronic disease care. In fact, it is increasingly being cited as critical for improving health outcomes and reducing costs in long-term treatment and conditions.

A recent review of the literature on chronic diseases and patient engagement (Simmons, Wolever, Bechard, & Snyderman, 2014) supported the link between improved outcomes and patient engagement, demonstrating that relatively short interventions can increase and promote positive health outcomes. Moreover, specific behavioral targets and their tracking appear essential to assess the role of patient engagement over time to achieve positive health outcomes. In contrast, poor patient engagement is a risk factor for worse chronic disease outcomes. In this framework, early identification of individuals who have low patient engagement coupled with tailored behavioral interventions to enhance participation may provide a reasonable and low-cost target for personalized healthcare innovation (Simmons et al., 2014). Additionally, achieving effective patient engagement could reduce healthcare costs in the sense that patients would decrease the demand for check-ups, general practitioner consultations, or the phenomenon of doctor shopping, because of being better able to manage their disease and treatment and to implement good health practices.

The promotion of patient activation and satisfaction, treatment adherence, and medical outcomes are critical issues intimately related to PCM. In fact, it is difficult to think that the engagement of the patient can be realized without an empathic dyadic exchange within a trustworthy patient-doctor alliance and relationship. The Patient Health Engagement (PHM) model (Graffigna, Barellò, & Triberti, 2015) suggests that the patients steadily get over changes in their health condition through the so-called “patient journey,” in which the principles of PCM could represent a guide for the physician’s work with patients.

In other words, the increasing occurrence of chronic diseases can be successfully dealt with through the PCM perspective and the subsequent effect on patient engagement (Borghini, Galli, & Vegni, 2016). However, modern medicine has to face other challenges including the ever-growing uncertainty affecting clinical practice, patient safety and vulnerability, and the clinician's vulnerability or inner life. PCM appears to show some limits in dealing with these new challenges.

UNCERTAINTY AND VULNERABILITY

Uncertainty in clinical practice is perhaps more invisible, but always present in healthcare (Eddy 1984; Han, Klein, & Arora, 2011), and it is becoming more and more a critical healthcare challenge in contemporary medicine. This topic has been studied since the 1950s, when research was conducted by René Fox (1957) and the results highlighted how difficult it was for physicians to cope with uncertainty during their training. Yet, there is no systematic and coherent knowledge about it, and research struggles to achieve a complete view on this topic (Han et al., 2019).

From a philosophical perspective, uncertainty is a “metacognition”; the awareness of the knowledge we have and its gaps. Han and colleagues (2011) proposed the definition of a “human epistemic state consisting of the conscious, metacognitive awareness of ignorance.” In other words, it is what we know that we do not know. There are different kinds of uncertainties in medical practice and some researchers have tried to create a taxonomy to show them all. For example, Han and colleagues (2011) proposed a three-dimensional taxonomy, which categorized uncertainty in three possible ways: 1) focusing on the issue (scientific, practical, personal); 2) focusing on the source (probability, ambiguity, and complexity) and, 3) focusing on the locus, the stakeholder whose point of view is being investigated (patient, physicians, family members, policymakers, etc.) (Han et al., 2011).

The authors suggest an alternative classification of three possible kinds of “I don't know” in the physician-patient interaction: 1) uncertainty because of the limited knowledge that science has today about that issue (Medicine does not know, the situation is ambiguous, the situation can only talk about probabilities), 2) uncertainty because of a particular physician's competence (The doctor does not know; it is not his/her field of training.), and 3) uncertainty that concerns the relationship with the patient (the physician cannot or does not want to tell the patient).

Uncertainty has always been an integral part of medical practice, and not always a negative one. For instance, uncertainty is the reason why people seek information and medical advice, and it is also the reason why scientific research and technological development still goes on. Nevertheless, most of the time, it is something difficult to cope with for both clinicians and patients (Babrow, Kasch, & Ford, 1998). It enhances pessimistic points of view and negative emotions, such as anxiety, indecision, and avoidant behaviors (Han et al, 2019). Moreover, nowadays there are certain factors that have increased the concern about this issue. In fact, it is not a coincidence that studies about this topic have increased in recent years. There are two main reasons why uncertainty is more of an issue today compared to 50 years ago. The first reason is the development of new technologies and the consequent physicians' insecure attitude towards adopting these new technologies. The second reason is the patients' involvement in clinical practice and their resulting awareness.

With regard to the first point, because of the development of evidence-based medicine and new technologies, physicians are more aware of their limits in knowledge than they were before (Han et al., 2019). Ironically, today's experts know a lot more, but feel like they know less compared to 50 years ago, because the wider the medical knowledge, the more complex it gets. For instance, there are a lot of different clinical interventions available and a lot of complex clinical situations to face, therefore it is not uncommon for two honest physicians to arrive at different conclusions on the same matter. Moreover, technology has brought complexity also to some secondary aspects of the clinical practice, such as physician-patient communications through telemedicine and electronic database to store clinical information. Sometimes, physicians struggle to find a satisfactory way to use these new resources (Daniel, Jabak, Sasso, Chamoun, & Tamim, 2018; Haluza & Jungwirth, 2014).

Furthermore, as previously pointed out, because of new technologies and advanced medical knowledge, today's patients often deal with chronic disorders and complex medical conditions. A consequence of that is the rising of what Lindblom (1959) called complex situations or clinically ambiguous situations in which goals and procedures are not clear from the beginning, and actions are undertaken a step at a time, constantly reevaluating the situation. In this context, everyone feels like the available information is not enough, and uncertainty and complexity creep through every pore (Epstein & Gramling, 2013). Especially chronic patients with serious long-term illnesses such as cancer, HIV infection, or diabetes, may endure feelings of vulnerability and ambiguity about their future (Parascandola, Hawkins, & Danis, 2002). In other words, wider knowledge and new technological devices brought more treatments into the modern world, but also more chronic and complex medical conditions, which enhanced uncertainty in clinical practice.

The second reason why uncertainty is a bigger issue today than it was before is increased patients' awareness. Nowadays, public opinion and mass media put a big emphasis on many medical controversies. Healthcare policymakers are concerned about this and are trying to reduce uncertainty in healthcare as much as they can (Han et al., 2011). Uncertainty in medical practice is not just a problem that only physicians are aware of anymore, but it concerns all the stakeholders. This is coherent with the spreading of PCM, which suggests that the best way to operate in clinical practice is to involve patients in the decision making and by exploring their concerns and expectations in order to lead the patient to take some control of his/her medical visit (Platt et al., 2001). Communicating and sharing medical information also means putting patients in the position of being aware of some degree of uncertainty.

Patients' awareness is linked to another new challenge for modern medicine, which is the growing demand for greater quality and safety in healthcare. Patients are increasingly called to actively participate to the care process (Longtin, Leape, Sheridan, Donaldson, & Pittet, 2010) in order to supervise their clinical treatments by the healthcare system itself, thus achieving the highest degree of quality and safe service available. In fact, the complexity of modern medical situations made patient participation and engagement necessary to watch over their overall treatment process (Davis, Jaclin, Sevdalis, & Vincent, 2007). The increase of multimorbidity, chronic illnesses, and uncertainty forced patients to be the ones acting as regulators of their healthcare treatment, putting different physicians in contact with one another and allowing the sharing of crucial clinical information that might otherwise be lost. For example, today, it may be a patient who reminds a doctor that he/she has a specific chronic condition (e.g. diabetes) or that he/she is undergoing also other medical treatments.

Complexity and uncertainty impact the inner lives of both clinicians and patients, making them feel vulnerable. Physicians' inner lives and vulnerabilities are two big challenges for modern medicine. The inner life of physicians refers to their inner and emotional reaction to patients' emotional distress, which may reflect a need to rescue the patient, a sense of failure and frustration when the patient's illness progresses, feelings of powerlessness against illness and its associated losses, grief, fear of becoming ill oneself, or a desire to separate from and avoid patients to escape these feelings (Meier, Black, & Morrison, 2001). Vulnerability is a very close and overlapping concept and, when referred to clinicians, regards their own sense of powerlessness and impotence. In fact, clinicians learn that patients are vulnerable because of their medical condition, but they are less comfortable with their own vulnerability and uncertainty. Some authors stated that medical students are taught to ignore uncertainty by cultivating an air of confidence (Atkinson, 1984; Katz, 1984) and that there is general discomfort with uncertainty and the possibility of error (Christakis, 1999). It seems as though the medical world is trying to eliminate uncertainty and achieve the perfect control of every clinical situation. From this perspective, the loss of control from the physician could represent a personal failure and a threat to his/her social reputation among colleagues (Gulbrandsen, 2018).

Clinicians may have a hard time accepting their limitations and their vulnerability because, in the past decades, there has been a big change in their social image; they used to be seen as the human incarnation of perfect, scientific, medical knowledge and, therefore,

were seldom questioned in their clinical practice. Nowadays, because of advanced technology developments, chronic illnesses, multimorbidity, and patients' health literacy, physicians are forced to face uncertainty, and they are struggling to adjust to a more vulnerable human role. The acknowledgment of uncertainty by physicians can lead to multiple questions. Should clinicians communicate uncertainty to their patients? How many degrees of uncertainty should be shared? What is the best way to treat a health concern?

As a matter of fact, uncertainty is often not communicated in clinical practice (Bansback, et al., 2017). In scientific literature, there are contrasting opinions among authors about the need to share uncertainty at all. Some researchers found that communication of epistemic uncertainty (uncertainty derived from the complexity and the ambiguity of a clinical situation) may damage the patient-physician relationship, reducing the patient's confidence, trust, and satisfaction, but those results are not consistent and more research is needed (Han et al., 2019). Other authors disagree and believe that these are excuses that do not work in the long run. In fact, according to them, this may be true as it relates to short-term satisfaction, but is not true as it relates to long-term care, where effective disclosure about uncertainty will protect a patient's trust (Hall, Dugan, Zheng, & Mishra, 2001; Parascandola et al., 2002). Another common objection to communicate uncertainty is the fear of making patients feel bad, but even if patients feel anxiety and distress it does not mean that they would rather not know about uncertainty. Actually, some pieces of evidence are demonstrating that, usually, patients would like to have more information than they receive, even if they would rather not make any decision afterward (President's Commission Study, 1982; Schneider, 1998).

Moreover, physicians have to do what is best for the patient, which means not only what is "medically" best. (Parascandola et al., 2002) The best way to treat a patient is also to build a respectful and honest relationship in which patients are free to introduce their values into the decision-making process. Patients are only able to introduce their values in the appropriate moment if they know about the uncertainty of their situation. Therefore, talking about uncertainty is not only the best practical solution, but it is also an ethical decision. At the same time, addressing uncertainty does not mean that the patient always needs to be aware of every detail surrounding the complexity and the ambiguity of his/her situation. Some patients prefer not to know every detail, and they are to be respected as much as the patients who want to be fully informed every step of the way. Forcing a patient's attention to uncertainty would be cruel. The best solution seems to be for healthcare practitioners to have a discrete preliminary discussion with their patient about how much he/she would like to know. Therefore, some degree of uncertainty should be addressed in routine decision making with patients, but not every detail, if that is the patient's wish (Parascandola et al., 2002).

Shared decision making should be offered to patients, especially in ambiguous situations in which medical factors alone seem to be indecisive. These are curing processes wherein a patient's values and opinions should be given more consideration, such as situations involving chronic medical conditions and long-term treatment. Ironically, these are the types of situations wherein physicians tend to oversimplify and appear more confident about only one treatment option, rather than going through every single treatment possibility with the patient (Parascandola et al., 2002).

In light of the fact that uncertainty should be addressed with patients, the real problem is how to do it effectively. In fact, uncertainty has to be addressed in an appropriate way and with the right attitude to protect both patients and physicians. For example, clinicians should address it with the right dose of ease and comfort, along with exhibiting a candid willingness to access additional expertise to supplement their own (Parascandola et al., 2002). However, how can physicians develop the "right" attitude towards their own vulnerability? How can they deal with the impact that uncertainty has on their social role and their inner lives? In the opinions of the authors, PCM is not enough to answer these questions, and a shift towards relationship-centered care (RCC) is needed (Beach et al., 2006).

CONCLUSION AND FUTURE DIRECTIONS

Facing the new challenges that are arising in healthcare, such as uncertainty and vulnerability, and their impact on a physician's inner life, adopting relationship-centered care (RCC) (Beach et al., 2006) may be a better-suited perspective than PCM. Relationship-centered care was first described, in 1994, by the Pew-Fetzer Task Force on Advancing Psychosocial Health Education (1994) as a third framing for the healthcare process, besides DCM and PCM.

RCC can be defined as care in which all participants appreciate the importance of their relationships with one another. RCC is founded upon 4 principles: (1) that relationships in healthcare ought to include the personhood of the participants, (2) that affect and emotion are important components of these relationships, (3) that all healthcare relationships occur in the context of reciprocal influence, and (4) that the formation and maintenance of genuine relationships in healthcare is morally valuable. In RCC, relationships between patients and clinicians remain central, although the relationships of clinicians with themselves, with each other, and with community are also emphasized (Beach et al., 2006).

The authors of this study view RCC as an evolution of the PCM perspective, which has the same inclusive intent as the one in the shift that happened from DCM to PCM. Despite the shift, PCM did not cancel the good practices of DCM, such as the biological parameters evaluation and the diagnosis, which still are crucial in every clinical practice. It simply added new elements, such as the importance of the patient taking an active role in his/her cure process, and the need to consider some psychological and social aspects. Today, we need relationship-centered medicine that includes PCM values, such as the relevance of the psychosocial view of the patient, and adds a new field of attention: the patient-physician relationship. In fact, in the opinions of the authors, focusing on the patient-physician relationship is an efficient way to provide good healthcare services. The relationship is the first assessment tool that can direct the appropriate degree of shared decision making, shared uncertainty knowledge, and patient engagement. Through the relationship, clinicians can understand both what their patients want and what their coping skills are and therefore, which communicative approach is the most appropriate. This does not mean that PCM contents are wrong, but they might be better contextualized within the specific patient situation in order to achieve a better clinical approach.

For example, PCM stressed the importance of patient engagement and shared decision-making without taking into account maladaptive coping cases, such as impulsive decision making, driven only by emotions rather than reason, denial, inconsistency, or use of alcohol and drugs, which are frequent especially in ambiguous and uncertain clinical situations. Shared decision-making has many advantages, but it is not always the best option. In particular, shared decision making overcomes the rigid paternalism that was previously dominant in the DCM approach, which did not allow for any form of engagement or autonomy of the patient. Nevertheless, the inclusive attitude that PCM is embracing sometimes risks reaching the opposite extreme in that the patient is alone making decisions that he or she is sometimes unable to make due to emotional vulnerability or confusion. This phenomenon is called "mandatory autonomism" (Schneider, 1998) and it is criticized as inappropriate. Mandatory autonomism could be the result of a physician's defensiveness wherein they withhold their decision-making, under the illusory aim of patient autonomy, so that they do not have to make difficult decisions, which nevertheless should be made by them (Roeland et al., 2014). On the contrary, patients turn to physicians because they need guidance, and it is a medical responsibility to analyze the situation and give professional opinions on what should be done in a clinical situation. Patients' preferences must be heard, but sometimes they are impossible or not clinically beneficial, therefore, the clinician should have the final word (Vegni & Borghi, 2017).

If both rigid paternalism and mandatory autonomism should be avoided, there are mainly three other approaches to communication that physicians can implement, which could be viewed as different implementations of the RCC frame of reference. The first one is palliative paternalism (Roeland et al., 2014). According to this clinical practice, in end-of-life care, physicians should assess the appropriate level of autonomy of the patient they are dealing with and decide what degree of shared decision

making is best in order to minimize confusion and pointless suffering (Roeland et al., 2014). If a patient is showing maladaptive coping behaviors, a physician should assume a more directive attitude and only ask limited, open-ended questions that propose concrete options. In this context, it is not the best choice to explain all of the medical treatments available and instead only offer unlimited information. It would be more appropriate to be clear on the patient's condition ("There is nothing left to do.") and provide an appropriate direction. This means also reframing the conversation to avoid the illusory "pulling the plug" burden on the patients and the patients' families. In fact, in palliative care, often there is no real choice to be made because the disease has already made the decision and there is nothing left to do, whereas giving a lot of information could give the wrong idea that there is still some responsibility as to the course of events. However, the authors wish to highlight that this approach should be grounded in the humility and compassion of the clinician, and only applied with the best interest of the patient in mind (Roeland et al., 2014).

Another less recent communicative approach that could be seen as compatible with relationship-centered care is the deliberative model (Emanuel & Emanuel, 1992). According to this model, in clinical interactions and shared decision making, the physician should lead the patient to the medical option that is better suited for his/her values and lifestyle. In particular, the physician should build a relationship with patients and engage in dialogues that elucidate the types of values embodied in the available medical options. Then, the physician should act as a teacher or a friend and suggest what, in his/her opinion, is both compatible with the bio-medic goals and the patient's values (already known through the relationship). This way, the clinicians keep their responsibility as specialists, but at the same time, they avoid coercion and manipulation, because the final decision is built on the patients' values and preferences previously explored through dialogue in a trustworthy relationship (Emanuel & Emanuel, 1992).

The third communicative approach that has been formulated in line with RCC reframing is linked to both the palliative paternalism and deliberative models. In fact, in both the palliative paternalism and deliberative approaches, shared decision making is not seen as a linear process, but rather as a complex structure where there are multiple factors in play. Some authors have analyzed this process and have theorized the concept of "shared mind" (Epstein & Street, 2011). From their point of view, a patient's choice is not based only on their personal cognitions and emotions, or on a linear communication with the physician, but instead reflects a dynamic, interactive process among individuals, such as family members, friends, and other healthcare professionals. To promote effective decision-making in uncertain situations, clinicians should be aware of this shared mind and also help the patient to recognize that his/her preferences are socially constructed. If the involvement of others is only implicit, there may be some invisible discrepancies, which can lead to manipulation and a discordant physician-patient relationship in the long term. Self-awareness and transparency, instead, allow the decision to be openly discussed together. In this context, clinicians can openly discuss different medical options with the whole group involved and support the creation of a socially constructed and informed decision (Epstein & Gramling, 2013). In other words, the shared mind can be a naturally occurring phenomenon, and also an ideal situation built by patients and clinicians who knowingly aim to reach the best decision-making process possible through this systemic communicative approach.

Shared mind, the deliberative model, and palliative paternalism are all communicative approaches congruent with RCC theoretical framework. In fact, they are all different decision-making approaches that are still based on the physician-patient relationship. In particular, the physician-patient relationship is seen as the crucial assessment tool to decide the best communicative approach with a patient. In this theoretical frame of reference, physicians and patients are involved together in the care process, but the physician can take over the decision-making responsibility when the patient is no longer able to do it because of his/her characteristics and/or situation. In the authors' opinions, usually, there is no right or wrong communicative approach simply, instead, there is the need to adapt clinicians' communicative behaviors to that of specific patients in specific clinical situations. This may be true especially in complex clinical conditions where there is a high degree of uncertainty, as in chronic

illnesses and multimorbidity issues. In fact, in these cases, because of the complexity and the chronicity, there could be a higher degree of patient vulnerability and maladaptive coping behaviors to address.

As previously mentioned, not only patients, but also clinicians, are struggling to accept the ever-growing uncertainty in clinical practice and their new vulnerable role. How can they be comfortable enough with their own vulnerability and be able to successfully implement communicative approaches, such as palliative paternalism, the deliberative model, and the shared mind? From the viewpoint of the authors, healthcare professionals should develop an RCC attitude and they should develop a congruent set of communicative skills. Concretely, medical studies should be integrated with specific classes on physician-patient communications that address these delicate and new topics. This would help them make their feelings acknowledgeable, acceptable, and manageable, rather than concealing them, which tends to be today's tendency. Through open discussions and practical training, physicians could equip themselves to cope with these new challenges in the best ways possible for both themselves and their patients. In particular, the best way to educate them would be through typical PCM modes of teaching and learning that are active learning methods, such as the use of role-playing and videotaping. These techniques are necessary tools for gaining a real understanding of the importance of doctor-patient communications and relationships and to feel the difficulties that can arise from them, such as the struggle to say "I don't know" in uncertain situations.

An example of this kind of training is the Program to Enhance Relational and Communication Skills (PERCS) (Browning, Meyer, Truog, & Solomon, 2007; Lamiani, et al., 2011), in which clinicians discuss and participate in role-play concerning difficult conversations that may happen with patients, such as giving bad news or asking for organ donations. No PERCS has been specifically designed on uncertainty in clinical practice yet, however, in the opinions of the authors, it would be a suitable topic for physicians' didactic structure and an innovative and precious field of education for clinicians.

In conclusion, modern medicine is facing different, but interconnected challenges due to the spread of chronic disease, the aging of the population, the need for reducing healthcare costs, and the growing complexity, uncertainty, and vulnerability that both patients and clinicians are dealing with. The authors believe that RCC could be the right theoretical perspective to cope with these present medical difficulties and to implement better healthcare quality and services.

ACKNOWLEDGMENT

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

REFERENCES

- Arora, N. K. (2003). Interacting with cancer patients: The significance of physicians' communication behavior. *Social Science & Medicine*, 57(5), 791–806. doi:10.1016/S0277-9536(02)00449-5 PMID:12850107
- Atkinson, P. (1984). Training for certainty. *Social Science & Medicine*, 19(9), 949–956. doi:10.1016/0277-9536(84)90324-1 PMID:6515428
- Babrow, A., Kasch, C., & Ford, L. (1998). The many meanings of uncertainty in illness: Toward a systematic accounting. *Health Communication*, 10(1), 1–23. doi:10.1207/s15327027hc1001_1 PMID:16370987
- Balint, E. (1969). The possibilities of patient-centered medicine. *The British Journal of General Practice*, 17(82), 269–276. PMID:5770926
- Bansback, N., Bell, M., Spooner, L., Pompeo, A., Han, P. K. J., & Harrison, M. (2017). Communicating uncertainty in benefits and harms: A review of patient decision support interventions. *The Patient - Patient-Centered Outcomes Research*, 10(3), 311–319.
- Barnett, K., Mercer, S. W., Norbury, M., Watt, G., Wyke, S., & Guthrie, B. (2012). Epidemiology of multimorbidity and implications for health care, research, and medical education: A cross-sectional study. *Lancet*, 380(9836), 37–43. doi:10.1016/S0140-6736(12)60240-2 PMID:22579043
- Beach, M. C., & Inui, T. (2006). Relationship-centered care: A constructive reframing. *Journal of General Internal Medicine*, 21(S1), S3–S8. doi:10.1111/j.1525-1497.2006.00302.x PMID:16405707
- Beaglehole, R., Epping-Jordan, J., Patel, V., Chopra, M., Ebrahim, S., Kidd, M., & Haines, A. (2008). Improving the prevention and management of chronic disease in low-income and middle-income countries: A priority for primary health care. *Lancet*, 372(9642), 940–949. doi:10.1016/S0140-6736(08)61404-X PMID:18790317
- Benjamin, E. J., Blaha, M. J., Chiuve, S. E., Cushman, M., Das, S. R., Deo, R., & Jiménez, M. C. et al. (2017). Heart disease and stroke statistics-2017 update: A report from the American Heart Association. *Circulation*, 135(10), e146–e603. doi:10.1161/CIR.0000000000000485 PMID:28122885
- Borghi, L., Galli, F., & Vegni, E. (2016). The patient-centered medicine as the theoretical framework for patient engagement. In Graffigna (Eds.), *Promoting patient engagement and participation for effective healthcare reform* (pp. 25–39). Hershey, PA: IGI Global.
- Browning, D. M., Meyer, E. C., Truog, R. D., & Solomon, M. Z. (2007). Difficult conversations in health care: Cultivating relational learning to address the hidden curriculum. *Academic Medicine*, 82(9), 905–913. doi:10.1097/ACM.0b013e31812f77b9 PMID:17726405
- Christakis, N. A. (1999). *Death foretold: Prophecy and prognosis in medical care*. Chicago: University of Chicago Press.
- Dall, T. M., Gallo, P. D., Chakrabarti, R., West, T., Semilla, A. P., & Storm, M. V. (2013). An aging population and growing disease burden will require a large and specialized health care workforce by 2025. *Health Affairs*, 32(11), 2013–2020. doi:10.1377/hlthaff.2013.0714 PMID:24191094
- Daniel, F., Jabak, S., Sasso, R., Chamoun, Y., & Tamim, H. (2018). Patient-physician communication in the era of mobile phones and social media apps: Cross-sectional observational study on Lebanese physicians' perceptions and attitudes. *JMIR Medical Informatics*, 6(2), e18. doi:10.2196/medinform.8895 PMID:29625955
- Davis, R. E., Jacklin, R., Sevdalis, N., & Vincent, C. A. (2007). Patient involvement in patient safety: What factors influence patient participation and engagement? *Health Expectations*, 10(3), 259–267. doi:10.1111/j.1369-7625.2007.00450.x PMID:17678514
- Eddy, D. M. (1984). Variations in physician practice: The role of uncertainty. *Health Affairs*, 3(2), 74–89. doi:10.1377/hlthaff.3.2.74 PMID:6469198
- Ekman, I., Wolf, A., Olsson, L. E., Taft, C., Dudas, K., Schaufelberger, M., & Swedberg, K. (2012). Effects of person-centred care in patients with chronic heart failure: The PCC-HF study. *European Heart Journal*, 33(9), 1112–1119. doi:10.1093/eurheartj/ehr306 PMID:21926072
- Emanuel, E. J., & Emanuel, L. L. (1992). Four models of the physician-patient relationship. *Journal of the American Medical Association*, 267(16), 2221–2226. doi:10.1001/jama.1992.03480160079038 PMID:1556799

- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, *196*(4286), 129–136. doi:10.1126/science.847460 PMID:847460
- Engel, G. L. (1981). The clinical application of the biopsychosocial model. *The Journal of Medicine and Philosophy*, *6*(2), 101–124. doi:10.1093/jmp/6.2.101 PMID:7264472
- Epstein, R. M., & Gramling, R. E. (2013). What is shared in shared decision-making? Complex decisions when the evidence is unclear. *Medical Care Research and Review*, *70*(1 Suppl), 94S–112S. doi:10.1177/1077558712459216 PMID:23035055
- Epstein, R. M., & Street, R. L. (2011). Shared mind: Communication, decision-making, and autonomy in serious illness. *Annals of Family Medicine*, *9*(5), 454–461. doi:10.1370/afm.1301 PMID:21911765
- Fox, R. C. (1957). Training for uncertainty. In R. Merton, G. C. Reader, & P. Kendall (Eds.), *The Student Physician: Introductory Studies in the Sociology of Medical Education* (pp. 207–241). Cambridge, MA: Harvard University Press. doi:10.4159/harvard.9780674366831.c13
- Graffigna, G., Barello, S., & Triberti, S. (2015). *Patient engagement: A consumer-centered model to innovate healthcare*. Warsaw, Poland: DeGruyter Open. doi:10.1515/9783110452440
- Gulbrandsen, P. (2018). The possible impact of vulnerability on clinical communication: Some reflections and a call for empirical studies. *Patient Education and Counseling*, *101*(11), 1990–1994. doi:10.1016/j.pec.2018.07.025 PMID:30087020
- Hall, M. A., Dugan, E., Zheng, B., & Mishra, A. K. (2001). Trust in physicians and medical institutions: What is it, can it be measured, and does it matter? *The Milbank Quarterly*, *79*(4), 613–639. doi:10.1111/1468-0009.00223 PMID:11789119
- Haluza, D., & Jungwirth, D. (2014). ICT and the future of health care: Aspects of doctor-patient communication. *International Journal of Technology Assessment in Health Care*, *30*(3), 298–305. doi:10.1017/S0266462314000294 PMID:25308693
- Han, P., Klein, W., & Arora, N. (2011). Varieties of uncertainty in health care: A conceptual taxonomy. *Medical Decision Making: An international journal of the Society for Medical Decision Making*, *31*, 828–838.
- Han, P. K., Babrow, A., Hillen, M. A., Gulbrandsen, P., Smets, E. M., & Ofstad, E. H. (2019). Uncertainty in health care: Towards a more systematic program of research. *Patient Education and Counseling*, *102*(10), 1756–1766. doi:10.1016/j.pec.2019.06.012 PMID:31227333
- Jackson, J. L., Kroenke, K., & Chamberlin, J. (1999). Effects of physician awareness of symptom-related expectations and mental disorders: A controlled trial. *Archives of Family Medicine*, *8*(2), 135–142. doi:10.1001/archfami.8.2.135 PMID:10101984
- Kaplan, S. H., Greenfield, S., & Ware, J. E. Jr. (1989). Assessing the effects of physician-patient interactions on the outcomes of chronic disease. *Medical Care*, *27*(3 Suppl.), S110–S127. doi:10.1097/00005650-198903001-00010 PMID:2646486
- Katz, J. (1984). *The silent world of doctor and patient*. New York: Free Press.
- Kingsley, C., & Patel, S. (2017). Patient-reported outcome measures and patient-reported experience measures. *BJA Education*, *17*(4), 137–144. doi:10.1093/bjaed/mkw060
- Kinmonth, A. L., Woodcock, A., Griffin, S., Spiegel, N., & Campbell, M. J. (1998). Randomized controlled trial of patient centered care of diabetes in general practice: Impact on current wellbeing and future disease risk. *British Medical Journal*, *317*(7167), 1202–1208. doi:10.1136/bmj.317.7167.1202 PMID:9794859
- Kinnersley, P., Stott, N., Peters, T. J., & Harvey, I. (1999). The patient-centredness of consultations and outcome in primary care. *The British Journal of General Practice*, *49*(446), 711–716. PMID:10756612
- Kleinman, A. (1989). *The illness narratives: Suffering, healing, and the human condition*. New York: Basic Books.
- Kravitz, R. L., Callahan, E. J., Azari, R., Antonius, D., & Lewis, C. E. (1997). Assessing patients' expectations in ambulatory medical practice. *Journal of General Internal Medicine*, *12*(1), 67–72. doi:10.1007/s11606-006-0010-6 PMID:9034949

- Lamiani, G., Meyer, E. C., Leone, D., Vegni, E., Browning, D. M., Rider, E. A., & Moja, E. A. et al. (2011). Cross-cultural adaptation of an innovative approach to learning about difficult conversations in healthcare. *Medical Teacher*, 33(2), e57–e64. doi:10.3109/0142159X.2011.534207 PMID:21275534
- Levinson, W., Roter, D. L., Mullooly, J. P., Dull, V. T., & Frankel, R. M. (1997). Physician-patient communication: The relationship with malpractice claims among primary care physicians and surgeons. *Journal of the American Medical Association*, 277(7), 553–559. doi:10.1001/jama.1997.03540310051034 PMID:9032162
- Lindblom, C. E. (1959). The science of “muddling through.”. *Public Administration Review*, 19(2), 79–88. doi:10.2307/973677
- Longtin, Y., Sax, H., Leape, L. L., Sheridan, S. E., Donaldson, L., & Pittet, D. (2010). Patient participation: Current knowledge and applicability to patient safety. *Mayo Clinic Proceedings*, 85(1), 53–62. doi:10.4065/mcp.2009.0248 PMID:20042562
- Maisiak, R., Austin, J., West, S., & Heck, L. (1996). The effect of person-centered counseling on the psychological status of persons with systemic lupus erythematosus or rheumatoid arthritis: A randomized, controlled trial. *Arthritis and Rheumatism*, 9(1), 60–66. doi:10.1002/art.1790090111 PMID:8945114
- McMillan, S. S., Kendall, E., Sav, A., King, M. A., Whitty, J. A., Kelly, F., & Wheeler, A. J. (2013). Patient-centered approaches to health care: A systematic review of randomized controlled trials. *Medical Care Research and Review*, 70(6), 567–596. doi:10.1177/1077558713496318 PMID:23894060
- McWhinney, I. (1989). The need for a transformed clinical method. In M. Stewart & D. Roter (Eds.), *Communicating with medical patients*. London: Sage.
- McWhinney, I. (1993). Why we need a new clinical method. *Scandinavian Journal of Primary Health Care*, 11(1), 3–7. doi:10.3109/02813439308994894 PMID:8484077
- Meier, D. E., Back, A. L., & Morrison, R. S. (2001). The inner life of physicians and care of the seriously ill. *Journal of the American Medical Association*, 286(23), 3007–3014. doi:10.1001/jama.286.23.3007 PMID:11743845
- Moja, E. A., & Vegni, E. (2000). *La visita medica centrata sul paziente*. Milano: Cortina Editore.
- Naylor, C., Parsonage, M., McDaid, D., Knapp, M., Fossey, M., & Galea, A. (2012). *Long-term conditions and mental health: The cost of co-morbidities*. London: The King’s Fund and Centre for Mental Health.
- Parascandola, M., Hawkins, J., & Danis, M. (2002). Patient autonomy and the challenge of clinical uncertainty. *Kennedy Institute of Ethics Journal*, 12(3), 245–264. doi:10.1353/ken.2002.0018 PMID:12472078
- Pew-Fetzer Task Force on Advancing Psychosocial Health Education. (1994). *Health Professions Education and Relationship-Centered Care*. San Francisco: Pew Health Professions Commission.
- Platt, F. W., Gaspar, D. L., Coulehan, J. L., Fox, L., Adler, A. J., Weston, W. W., & Stewart, M. et al. (2001). “Tell me about yourself”: The patient-centered interview. *Annals of Internal Medicine*, 134(11), 1079–1085. doi:10.7326/0003-4819-134-11-200106050-00020 PMID:11388827
- Pollack, M. M., Holubkov, R., Funai, T., Clark, A., Berger, J. T., Meert, K., ... & Berg, R. A. (2014). Pediatric intensive care outcomes: Development of new morbidities during pediatric critical care. *Pediatric critical care medicine: A journal of the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies*, 15(9), 821.
- President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. (1982). *Making health care decisions* (Vol. 1). Washington, DC: U.S. Government Printing Office.
- Rao, J. K., Weinberger, M., & Kroenke, K. (2000). Visit-specific expectations and patient-centered outcomes: A literature review. *Archives of Family Medicine*, 9(10), 1148–1155. doi:10.1001/archfami.9.10.1148 PMID:11115222
- Rathert, C., Wyrwich, M. D., & Boren, S. A. (2013). Patient-centered care and outcomes: A systematic review of the literature. *Medical Care Research and Review*, 70(4), 351–379. doi:10.1177/1077558712465774 PMID:23169897

Robinson, J. H., Callister, L. C., Berry, J. A., & Dearing, K. A. (2008). Patient-centered care and adherence: Definitions and applications to improve outcomes. *Journal of the American Academy of Nurse Practitioners*, 20(12), 600–607. doi:10.1111/j.1745-7599.2008.00360.x PMID:19120591

Roeland, E., Cain, J., Onderdonk, C., Kerr, K., Mitchell, W., & Thornberry, K. (2014). When open-ended questions don't work: The role of palliative paternalism in difficult medical decisions. *Journal of Palliative Medicine*, 17(4), 415–420. doi:10.1089/jpm.2013.0408 PMID:24588626

Rosenberg, E. E., Lussier, M. T., & Beaudoin, C. (1997). Lessons for clinicians from physician-patient communication literature. *Archives of Family Medicine*, 6(3), 279–283. doi:10.1001/archfami.6.3.279 PMID:9161356

Safran, D. G., Taira, D. A., Rogers, W. H., Kosinski, M., Ware, J. E., & Tarlov, A. R. (1998). Linking primary care performance to outcomes of care. *The Journal of Family Practice*, 47(3), 213–220. PMID:9752374

Schneider, C. E. (1998). *The practice of autonomy: Patients, doctors, and medical decisions*. New York: Oxford Univ. Press.

Simmons, L. A., Wolever, R. Q., Bechard, E. M., & Snyderman, R. (2014). Patient engagement as a risk factor in personalized health care: A systematic review of the literature on chronic disease. *Genome Medicine*, 6(2), 16. doi:10.1186/gm533 PMID:24571651

Street, R. L. Jr, Makoul, G., Arora, N. K., & Epstein, R. M. (2009). How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Education and Counseling*, 74(3), 295–301. doi:10.1016/j.pec.2008.11.015 PMID:19150199

Vegni, E., & Borghi, L. (2017). Patient-centered medicine in palliative cancer care: The impossible choice between physician's responsibility and patient's preferences. *Tumori*, 103(2), e21–e21. doi:10.5301/tj.5000604 PMID:28106246

Vlieland, V. T. P. (2002). Managing chronic disease: Evidence-based medicine or patient centered medicine? *Health Care Analysis*, 10(3), 289–298. doi:10.1023/A:1022951808151 PMID:12769416

Ward, B. W. (2013). Prevalence of multiple chronic conditions among US adults: Estimates from the National Health Interview Survey, 2010. *Preventing Chronic Disease*, 10. PMID:23618545

Wells, K. B., Rogers, W., Burnam, A., Greenfield, S., & Ware, J. E. Jr. (1991). How the medical comorbidity of depressed patients differs across health care settings: Results from the Medical Outcomes Study. *The American Journal of Psychiatry*, 148(12), 1688–1696. doi:10.1176/ajp.148.12.1688 PMID:1957931

Wiederhold, B. K., Riva, G., & Graffigna, G. (2013). Ensuring the best care for our increasing aging population: Health engagement and positive technology can help patients achieve a more active role in future healthcare. *Cyberpsychology, Behavior, and Social Networking*, 16(6), 411–412. doi:10.1089/cyber.2013.1520 PMID:23751102

Williams, S., Weinman, J., & Dale, J. (1998). Doctor-patient communication and patient satisfaction: A review. *Family Practice*, 15(5), 480–492. doi:10.1093/fampra/15.5.480 PMID:9848436

Eugenia Cao di San Marco is an intern of the Unit of Clinical Psychology, at Santi Paolo and Carlo Hospital, in Italy. She holds a 5 year degree in clinical psychology.

Elena Vegni is an Associate Professor of Clinical Psychology in the Department of Health Sciences at the University of Milan and the Chief of the Clinical Psychology Unit of the Santi Paolo and Carlo University Hospital. She holds a 4-yrs degree in Philosophy, a 5-yrs degree in Psychology and a training in Psychotherapy. She teaches medical students at the University of Milan. Her academic work is focused on clinician-patient communication, patient education, and patient illness experience. She is author of several national and international articles published in journals such as Patient Education and Counseling, Journal of Health Psychology, Minerva Medica and Medical Education. With Egidio A. Moja she co-authored a book titled "The patient centred clinical consultation," published by Cortina, Milan, Italy.

Lidia Borghi is a post-doctorate research fellow of Clinical Psychology of the Department of Health Sciences at the University of Milan. She holds a 5 year degree in cognitive neuroscience and a Ph.D. in clinical psychology. Her research is focused on clinical and health psychology, clinician-patient communication, and patients' illness experience. She is the author of several national and international articles.