



# Promoting relationship-centred care skills and attitudes: study protocol for the development and effectiveness assessment of a training program for health professionals

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## Abstract

**Background:** Patient-centred and relationship-centred care (RCC) are considered crucial for therapeutic success. However, due to time pressure and fatigue, among other constraints, health professionals tend to act based on implicit directive (i.e., more authoritative) attitudes, common to the traditional biomedical approach to care. Despite current agreement on the importance of the relationship established between patients and health professionals, limited understanding exists regarding how to promote health professionals' implicit attitudes, in line with the concept of RCC.

**Goals:** To develop and evaluate the effectiveness of a sustainable short-term training program to promote awareness and endorsement of attitudes and values aligned with RCC in health professionals.

**Methods:** The development of the training program to promote RCC attitudes will be supported by literature reviews and a Delphi panel to define its structure, format, and contents. The effectiveness assessment of the RCC training program will entail a 2-arms randomized controlled trial, over three moments: at baseline, immediately after the training, and two months afterward. For the effectiveness assessment, implicit and explicit attitudes regarding RCC will be evaluated, considering the sociodemographic and professional characteristics of the participants. An implicit association test (IAT) targeting RCC attitudes will be specifically developed and validated for the Portuguese population to be applied in the effectiveness assessment process. Intention-to-treat and per-protocol statistical analyses will be performed for primary and secondary outcomes, respectively.

**Discussion:** Integrating RCC-related contents in health professionals' education programs may promote attitudes more aligned with RCC and fitting with the participatory healthcare paradigm.

**Keywords:** Centered care, Shared decision-making, Implicit attitudes, Health personnel, Mixed-methods approach.

## Introduction

The mastery of specific health-related technical skills is a fundamental asset for health professionals to ensure good quality of care. However, health professionals also need to have interpersonal qualities – e.g., empathy and active listening, pivotal skills for therapeutic negotiation (Miller & Rollnick, 2013). This is of particular importance in the context of the provision of care for chronic health conditions,

representing the leading cause of mortality in developed countries nowadays and accounting for 57% of all deaths worldwide, being also a significant disability burden for those living with a disease (World Health Organization, 2018). With the main focus on hard skills and health technologies for preventing or treating diseases, interpersonal and dynamic processes, such as the quality of the relationship, with direct impact on patients' adherence to treatment (Heszen-Klemens & Lapińska, 1984; D. Roter, 2000) and satisfaction (Evans

et al., 1987; Hall & Dornan, 1988), become second-placed in most health professionals' training curricula.

Within chronic health conditions, the focus on the quality of the therapeutic relationship and active involvement of patients is especially relevant since long-term therapeutic success lies, to a large extent, in the therapeutic alliance between health professionals and patients (and, not rarely, between health professionals and patients' relatives). This also applies to other pathologies such as mental disorders. For example, patients with dementia were often shown to respond more positively when involved in their treatment (Kim & Park, 2017). On one hand, patients need to effectively self-manage the disease, namely by adopting adequate health-related behaviours. On the other hand, in a collaborative process, health professionals have the fundamental role of promoting patients' motivation and empowerment by encouraging them to actively participate in the process of clinical decision and by adapting the intervention to their needs and capacities (Wyer et al., 2014). In this context, and most particularly in the case of 'silent' diseases, such as diabetes or arterial hypertension, effective clinical intervention happens when health professionals promote: (a) adequate therapeutic alliance, focusing on patient-doctor agreement about which are the relevant/adequate goals and corresponding necessary/acceptable tasks, (b) adequate attention to patient's characteristics, besides diagnosis, (c) patients' internal locus of control regarding the disease, (d) promotion of patients' responsibility and motivation to change, and (e) success attribution to the patient (Santos, 2009). Nevertheless, without adequate interpersonal skills, more often than not, health professionals, in many instances those with more years of experience, fail in fundamental aspects, namely in appropriately dealing with anxiety experienced by patients, or explaining the complexity of treatments and/or discussing therapeutic options (Beadle & De La Vega, 2019; Costa et al., 2013; Haidet et al., 2002; Mariscotti, 2008).

The growing interest on concepts such as patient (Planetree Inc. Picker Institute, 2008), person (Ekman et al, 2011) and relationship centredness (Wylie & Wagenfeld-Heintz, n.d.), or participatory healthcare (Hood & Auffray, 2013), derives from the recognition that the treatment of diseases, such as those chronic in nature, depends on an active collaboration between the doctor and the patients and their families (Robinson et al., 2007).

Given the influence of environmental cues in attitudes formation and activation (A Karpinski & Hilton, 2001), it has been established that prescriptive environments tend to promote health professionals' directive/prescriptive attitudes, whereas relationship-centred care (RCC)-oriented environments promote more negotiation-oriented health professionals (social contamination of healthcare styles) (Rydell & McConnell, 2006; Wyer et al., 2014). Such assumption is important because it would mean that implicit attitudes, though persistent, are modifiable. Indeed, it has been shown to be possible to change implicit attitudes throughout specific training programs (Petty & Wegener, 1998; Rydell & McConnell, 2006).

Though, building an RCC context is not always easy. In their daily practice, health professionals face constraints (e.g., time pressure, lack of solid information to make a decision, fatigue) (Hurst et al., 2005) that drive them to adopt a traditional biomedical approach to care, making and transmitting clinical decisions to patients, frequently based on non-conscious awareness, informed by stereotypes-based bias phenomena, among other implicit cognitive factors (Aarts et al., 1998; Dijksterhuis et al., 2006b).

From the perspective of cognitive psychology and social cognition, most part of decisions are taken without conscious processing of information, namely informed by priming, illusory correlations, and stereotypes-based bias phenomena (Aarts et al., 1998; Dijksterhuis et al., 2006a). Behaviours are known to be predicted by attitudes, involving three dimensions: a cognitive component, an affective component, and a behavioural component (Andrew Karpinski & Hilton, 2001). Explicit attitudes are open to conscious inspection, though their expression/verbalization often depends on social desirability and require deliberative thought to avoid automatic responses. So, when asking individuals to report about explicit attitudes towards a socially sensitive area, there is a natural propensity to disregard the individual's real tendency response. Alternately, implicit attitudes are thought to shape people's automatic reactions to objects and to define daily behaviours related with those objects (Andrew Karpinski & Hilton, 2001).

An improvement of professionals' knowledge is not always followed by an analogous change in behaviour, since changes in attitudes are often perceived to follow rather than to precede changes in behaviour (Grimshaw & Russell, 1994). For example, one may argue that medical doctors tend to prescribe behaviours in the same way they prescribe drugs. Indeed, if they

believe their role is to tell patients what to do, how to solve their health problems, then a directive posture may be perceived as an adequate communication process, adopted for behavioural suggestions, keeping in line with a biomedical perspective in which negotiation takes a back seat.

Sharing and expressing own's attitudes is heavily affected by social desirability effects, which make its assessment difficult to undertake. Nevertheless, due to the important role of attitudes in decision making, it is important to assess health professionals' attitudes regarding RCC as a marker of the quality of patient-doctor relationship. Moreover, given the current agreement on the importance of patient-doctor relationship and its impact on positive clinical outcomes (for example, in terms of patient satisfaction (Hall & Dornan, 1988), doctor satisfaction (Roter et al., n.d.) or patient health outcomes (Stewart, 1995), having valid and reliable instruments to measure RCC-favourable attitudes is determinant to delineate awareness raising strategies to promote practitioners' attitudes and behaviours regarding RCC.

### **Aims and goals**

The main goal of this study is to develop and evaluate the effectiveness of a sustainable short-term training program to promote awareness and endorsement of values aligned with RCC, while ensuring clinical decision-making based on the best clinical-scientific evidence.

Secondary goals of the study are to develop and assess the psychometric properties of an Implicit Association Test (IAT), suitable for the evaluation of medical doctors' RCC implicit attitudes, and to characterize Portuguese health professionals' implicit and explicit attitudes towards RCC, professionals' gender, years of experience, and health setting (e.g., public or private care).

## **Methods**

This is an intervention study, following a 2-arms open-label parallel randomized controlled trial (RCT). The intervention group will be exposed to RCC training skills, whereas the control group will have no exposure to the RCC-IAT training program.

### **Sampling details and characteristics of the sample**

A sample of physicians with active clinical practice with chronic patients will be randomly selected from

the association of general and family medicine doctors. This medical specialty was selected because it typically values the continuity of the healthcare process and, therefore, the therapeutic alliance (Santos et al, 2016). Invitations will be followed by informed consent forms and participation will be fully volunteer. Those who will consent to participate will be randomly allocated to the control or intervention arm, following a match-to-case process, considering gender and years of professional experience within the specialties will be assured (more or less than ten years of experience). Both intervention (exposed to RCC skills training – going through internship as usual) groups will have 36 professionals in each arm. A dropout rate of 20% will be considered, which implies the recruitment of at least 45 doctors by arm. Sample size will be adjusted according to the clinical relevance of the primary outcome: the implicit attitudes.

### **Definition of the intervention**

The intervention (i.e., RCC training program) will be developed based on systematic and narrative literature reviews (following PRISMA guidelines) and the Delphi method. The main goal of the literature reviews will be to integrate knowledge about: (a) estimating the effect size of patient/relationship centred therapeutic approach on intervention effectiveness, (b) impact of therapeutic alliance on intervention effectiveness, (c) assessment methods of implicit and explicit attitudes (pros and cons of different methods), (d) best training/practices for formation of new implicit attitudes and effective cognitive and (e) affective contents/modes for promoting RCC implicit attitudes in a brief group training setting.

On basis of the literature reviews, a Delphi panel with experts with relevant background (namely, experience on healthcare and healthcare practice research, patient-doctor communication, health psychology, cognitive and social psychology, sociology) will be conducted to obtain consensus about how to organize, promote and execute the training. No quota criteria will be used in terms of gender or geographic area of intervention. The list of experts will be as comprehensive and inclusive as possible.

### Data collection and variables under study

Data will be collected through online self-administered questionnaires answered at baseline, immediately after the training, and two months afterwards. At baseline, data on participants' socio-demographic (e.g., age and gender) and professional/clinical indicators (e.g., years of experience, type of pathologies) will be collected. For effectiveness assessment of the RCC-IAT training program, the following primary outcomes will be evaluated (for both arms and for both moments after the intervention): RCC-IAT scores, empathy and active listening markers, motivational interviewing communication strategies (including open-close questions ratio, paraphrases, summarizing patients' verbalization). Videotaped clinical encounters will be audiotaped and independently coded by two different researchers according to a structured checklist of empathic and motivational interview communication strategies. Secondary outcomes: professionals' perception regarding patients' satisfaction, perception of self-efficacy to cope with resistant patients. Control variables will include health professionals' gender, clinical specialization, years of experience, and most frequent type of pathologies. Whenever possible, instruments with studied psychometric characteristics will be used.

### Data analysis

SPSS version 26.0 for Windows (or more updated version, at the moment of the analysis) and R packages will be used for data analysis. The level of statistical significance for all tests will be set as  $\alpha = .05$ .

Sociodemographic and outcome variables will be described for the three moments of observation in the effectiveness assessment. Intention-to-treat (ITT), as primary analysis (for main outcomes), and per-protocol (PP) statistical analyses, as supportive analysis (for secondary outcomes), will be performed. In the ITT analysis, imputation of the last observation will be done for those participants who did not undergo the final evaluation. For the PP analysis, only those who completed the three evaluations will be included.

Univariate analysis will include the description of variables' central tendency (means and medians) and

respective dispersion measures. Qui-square test (with Yates adjustment, when necessary) will be used to assess the association between nominal variables. Continued variables will be compared (between arms, at the same momentum) by independent samples t-student test or by its non-parametric equivalent (Mann-Whitney test), when adequate.

Effect of the intervention will be studied by linear or logistic regression analysis (according to the nature of the dependent variable), having as dependent variables test-retest variations, adjusting for conceptually (and statistically) relevant variables. The size of the intervention will be assessed using the Cohen's d coefficient and odds ratio, when significant.

### Ethical issues

Ethical authorization for data collection will be sought from the Ethics Committee of the Centro Académico de Medicina de Lisboa. Moreover, validated instruments will be used with consent from the respective original authors. The IAT testing and Delphi expert panel forms will be accompanied by information on: study aims, requested tasks, data confidentiality and dropping out option at any time without any consequences. Participants invited for the RCT will be asked to sign the informed consent before their engagement in the study. Collected data will be pseudonymised.

### Discussion

The aim of the present study is to take a first step in understanding physicians' attitudes to relationship-centred care and to develop a sustainable short-term training program to promote attitudes aligned with this approach.

Traditionally, patients were expected to adopt a passive role and acquiesce to the doctors' views and plan for treatment. This more paternalistic model has been gradually challenged for the past decades by critics and studies that increasingly put in evidence ethical and clinical benefits of more collaborative models, with positive impact on patient satisfaction and acquired/maintained well-being (Hall & Dornan, 1988; Oliveira et al, 2012; Rathert, Wyrwich, & Boren, 2012).

Naturally, a therapeutic alliance is of particular importance for those with chronic conditions because of the long-term implications and the experience they often have with their own health condition. In such cases, patients should have an active voice and be involved in defining the treatment process with their doctor. In dementia, for example, studies have shown that person-centred care interventions reduce agitation, neuropsychiatric symptoms, depression, and improve the quality of life (Kim & Park, 2017). Moreover, it is important to consider the role that patients' well-being plays on treatment adherence and self-management behaviors (Kahn et al., 2007; Lemmens et al., 2008). In extreme situations (involving intense physical pain or imminent treat such as crisis situations) the best practice would be the adoption of a more directive posture by the doctor.

Notwithstanding the positive impact of relationship-centred care on both patients and doctors, health practitioners' adherence to RCC-friendly values remains a challenge. A contributing factor may be constraints, like time-pressure or lack of information, which can prompt a resort to quicker and less demanding cognitive strategies to deal with patients. The shared set of beliefs of a given healthcare organization or group may also influence the extent to which health practitioners involve patients during treatment.

As far as we are aware, this is the first study with a specific focus on the training of RCC-favourable attitudes. However, some limitation should be taken into account from the beginning. First, it is important to consider the extent to which doctors' implicit attitudes on relationship-centred care can have an impact on the set of interactions established with their patients. There are numerous other variables, namely demographic, ethnic, or religious domain, among others, that can exert influence on how doctors relate and respond to patients (Jelenec & Steffens, 2002; Maina et al., 2018; Popper-Giveon, 2019; Sabin et al., 2008). In this regard, the present study was set out to follow-up a real-world short-term training program to assess if the promotion of RCC-friendly attitudes does translate into more RCC-friendly behaviors. Another potential limitation is participants' dropout rate, which can represent a challenge to the assessment of

the effectiveness of the intervention program. Nevertheless, this risk was already taken into account when estimating the sample size of each study arm. Also, as most therapeutic relationship-related questionnaires tend to address exclusively patients' point of view, there is considerably less information available concerning health practitioners' feedback on relationship-centred care.

For future research, more needs to be understood regarding doctor-patient relationships. What constraints and other factors are creating resistance against performing RCC-friendly interventions. More research is also necessary to further our understanding of attitudes in Portuguese healthcare practice facilities, at both an individual and organizational level, as well as to further develop instruments and sustainable training programs to assess and promote RCC-friendly values in health practitioners.

## Conclusions

Health professionals' attitudes regarding RCC is a marker of the quality of therapeutic relationship. The promotion of implicit (and, hence, more automatic) attitudes in line with this perspective will allow to delineate awareness-raising strategies to promote practitioners' attitudes and behaviours regarding RCC. By capacitating health professionals, we are making them more able to promote patients' motivation, empowerment, and autonomy, thus encouraging them to actively participate in the process of clinical decision and adapting the intervention to their needs and capacities. which ultimately will have the potential to contribute to an increase in health gains and diminish of healthcare expenditures. Moreover, research on the interaction that occurs between doctors and patients during consultations is important to improve the outcome of patient care.

## Declaration of conflicting interests

The authors declare that they have no conflict of interest.

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