



Relationship-centred care: antidote, guidepost or blind alley? The epistemology of 21st century health care

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Abstract

Contemporary health care is increasing in complexity and lacks a unifying understanding of epistemology, methodology and goals. Lack of conceptual consistency in concepts such as 'patient-centred care' (PCC) typifies system-wide discordance. We contrast the fragmented descriptions of PCC and related tools to its own origins in the writings of Balint and to a subsequent construct, relationship-centred care (RCC). We identify the explicit and elaborated connection between RCC and a defined epistemological foundation as a distinguishing feature of the construct and we demonstrate that this makes possible the recognition of alignments between RCC and independently developed constructs. Among these, we emphasize Schon's reflective practice, Nonaka's theory of organizational knowledge creation and the research methodology of realist synthesis. We highlight the relational principles common to these domains and to their common epistemologies and illustrate unsatisfying consequences of adherence to less adequate epistemological frameworks such as positivism. We offer RCC not as an 'antidote' to the dilemmas identified at the outset but as an example that illuminates the value and importance of explicit identification of the premises and assumptions underlying approaches to improvement of the health care system. We stress the potential value of identifying epistemological affinities across otherwise disparate fields and disciplines.

Background

A dilemma within today's health care framework is how scientifically sound services can be provided to large populations without sacrificing the benefits of effective patient-provider interactions and relationships. In addition to social and spiritual support, these benefits may include enhanced health care outcomes [1] and a decreased rate of diagnostic and therapeutic error. The need to maximize such benefits is abundantly recognized with increasing emphasis on a 'patient-centred' perspective in health policy [2], health economic [3] and health educational arenas. However, amidst an unprecedented explosion of information from biomedical research, increased patient volumes and demands on documentation for billing purposes, time pressures and distractions have

never been more formidable for clinical practitioners in the United States as well as in other environments.

This article will explore the proposition that approaches to complex challenges necessitate attention and commitment to an appropriate epistemological framework, one that encompasses the experiential and relational, as well as the objectively observable, dimensions of health care. We will take as our focus the relationship-centred care (RCC) construct introduced in 1994 by means of a report of a task force jointly sponsored by the Pew and Fetzer Foundations [4]. We will explore several features of this construct, and how it relates to several domains of health care and clinical practice, including those to do with team-based care and organizational culture. We perceive that RCC offers a promising example of the kind of approach needed to achieve viable

integration of goals and means across the complexity of the health care system.

Patient-centred care (PCC) as a predecessor of RCC

RCC built upon a rich body of work, much of which is cited or otherwise referred to in the 1994 Pew/Fetzer Task Force report, which introduced the construct [4]. A predecessor construct, ‘patient-centred care,’ a virtually ubiquitous term within today’s health care context, is properly credited to the Balints, Michael [5] and Enid [6]. In the course of their primary project report [5], Michael Balint unfolded a vision of a network of relationships, which impact on the delivery of health care to individual patients by individual practitioners. These included, in addition to the patient–practitioner relationship, practitioner–consultant relationships, teacher–pupil relationships, patient–family and patient–employer relationships and the patient’s relationship to her own illness. The Balints brought psycho-therapeutic and psycho-analytical principles to bear on the activities of general practitioners in England in the 1950s. They threw light on the practitioner-as-person using concepts such as transference (emotional bonding, positive or negative, that patients experience towards the therapist) and counter-transference (the comparable emotional bonding experienced by the therapist towards the patient). In other words, the Balints’ vision of PCC recognized and accepted the affective dimension of human relationships as essential to health care interactions. The Balints’ relational construct embodied a shift of the power relationship away from the linear ‘doctor–patient’ paternalism so vividly and pessimistically described by both Parsons [7] and Foucault [8]. The Balints furthermore called for a broader concept of illness and disease, insisting on the importance of the patient experience of illness and the psychological correlates of physical disease. The Balints’ first candidate as a label for the approach they were developing was ‘whole person-centred medicine’ [9]. They later settled on ‘patient-centred care’.

The Balints’ elaboration of PCC constituted a precedent for the RCC construct in many important ways. The 1994 Pew/Fetzer Task Force report went beyond the Balints [4]. It related itself to the phenomenology of Merleau-Ponty [10] in rejecting a dichotomization between mind and body, and also to the epistemological framework of Michael Polanyi [11]. Polanyi described the complex and dynamic interplay between tacit awareness, or experience, and the verifiable object of attention. Polanyi recognized that a great deal of interpreted data, that is, ‘information’, is processed and translated into operational knowledge without the ‘knower’ being conscious of the process [11]. The resulting ‘tacit dimension’ creates the basis of the multidimensional relational context elaborated within the Pew/Fetzer report and earlier by the Balints.

The Pew/Fetzer authors embraced the concept of professional practice espoused by Donald Schon, a concept that also embraces the self-organizing nature of human and relational consciousness articulated by Polanyi [12,13]. Schon rejected the purely technocratic, cognitive, model of professional discipline in favour of one that emphasizes reflection and the ability to improvise not previously learned solutions to new problems. Finally, the RCC initiators advocated a dynamic, active caring relationship between practitioners and their patients, beyond the conventional model of

the empathic but dispassionate doctor. This has been termed ‘emotional’, as opposed to purely ‘cognitive’ care [14].

In later elaborations of RCC by members of the original task force, several interrelated attributes of the construct were emphasized, namely personhood of the protagonists, the positive value of acceptance of affect and emotion on the part of all parties to health care relationships, and the reciprocal character of such relationships [15]. Among these, we would single out the second as perhaps the most singularly defining proposed characteristic of RCC. Halpern and others [16,17] have recognized the importance of this principle and contrasted it to the often endorsed notion of sympathy from a distance on the part of the practitioner in relationship to a patient. We perceive this to correspond to deeper distinctions between RCC and much of the current philosophical and methodological landscape within health care.

What’s happened to ‘patient-centred care’?

Returning to the early formulations of PCC, following their sentinel reports, aspects of the Balints’ prescription were taken up and developed. Engel issued a call for a new medical model, incorporating attention to psychological and social issues to yield a ‘biopsychosocial’ model for clinical practice [18]. Levenstein and others developed what they termed a ‘patient-centred clinical method’, which called for routine consideration of patient expectations, feelings and fears; attention to subtle signals of concealed concerns in the course of medical interviewing; and encouragement by practitioners of patient expressions of concerns [19–21]. This in turn led to a scoring system for assessment of clinical learners’ patient-centred interviewing skills [19], and quantitative assessment of patient preferences for elements of PCC [22].

Even as the phrase ‘patient-centred care’ was broadly taken up and defined by the US Institute of Medicine as care that is ‘respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions’ [23], its interpretation took on different meanings in different contexts. A recent literature review and analysis detected four distinct categories of interpretation and usage of the phrase ‘patient-centred’ [24]. These may be loosely characterized as (1) the ‘whole-person’ approach typified by the use of the biopsychosocial model of Engel to guide practice and medical education [25]; (2) the ‘consumerist’ model of patient autonomy in decision making given adequate decision aides and communication tools [2]; (3) the pursuit of coordinated care and de-fragmentation of care for populations defined by specific health conditions; and (4) a construct incorporating humanistic, phenomenological and narrative values in tandem with respect for scientific inquiry and empirical validation of policy and clinical practice. Of these, the first three are vulnerable to reductionism [24]. Engel’s biopsychosocial construct may not escape the limitations of the biomedical model from which it seeks to escape [24]. The consumerist interpretation, by eliminating the personhood of the practitioner and reducing her to the status of a technical advisor and operator, potentially ignores the relational dimension entirely [26]. Finally, coordination and defragmentation of care do not guarantee that the relational dimension of care will be maximized and may not be achievable without it.

The above features of health care delivery, that is, care coordination, patient satisfaction, attention to patient social and psychological needs, and engagement of patients in decision making, are desirable attributes. Vulnerabilities arise when they are divorced from a conceptual framework adequate to embrace the actual complexity of relational processes in health care. In the course of operationalizing PCC for purposes of instruction and evaluation, the psychological, experiential and social dimensions of the patient may be reduced to checklists and psychometrically validated scales. For example, early attempts to codify the Balints' original exposition into a teachable and assessable system [20,21] emphasized the need for practitioners to search parallel agendas between themselves and their patients and to heed their own queries and procedures in addition to patients' expectations, feelings and fears [20]. Stewart *et al.* developed a scoring system for evaluation of interview quality on the part of practitioners, including medical students [21]. Such approaches may not intend rejection of the affective and tacit dimensions of care or of its underlying complexity. However, in the absence of appropriate epistemological nourishment, linear constructs tend to dominate the field. Oversimplified descriptions of evidence-based decision making exemplify this tendency [26,27]. In such descriptions, the patient herself is typically eliminated from the description as an active protagonist and appears primarily as a source of information for the 'fact finding' operator, that is, the practitioner [26,28]. Elaborations of evidence-based medicine [29,30] may be seen as extreme examples of a widespread reductionist liability within today's health care environment.

Within current tools of PCC, shared decision making (SDM) occupies an important place. Indeed, it has been hailed as its pinnacle [31]. The origins of SDM trace to the 1982 report of a US Presidential Commission [32]. As with PCC, definitions and understandings of SDM vary widely in the literature [33], and range from interpretations centring around relational principles [34] to epidemiologically sequestered formulations. The latter stems importantly from the evidence-based medicine movement. Within the Grading of Recommendations Assessment, Development and Evaluation (GRADE) framework for clinical guideline development, application of SDM is reserved to settings where the recommendations are 'weak', and a prescriptive relational mode proposed for 'strong' recommendations [35]. Although strength of recommendations is influenced by consideration of patient values and preferences and by assessments of risk versus benefit, the GRADE formulation comes perilously close to subjugating relational principles to estimations of research evidence.

More generally, SDM is considered to be suited to contexts characterized by 'equipose', that is, when valuations of harms and benefits are equal and health care decisions are 'value-sensitive' [36,37]. Elwyn *et al.* go further, requiring that both practitioner and patient must perceive 'equipose' to be present for SDM to apply [37]. Since SDM frequently incorporates formal decision aides for purposes of communicating quantitative aspects of tradeoffs between favourable and unfavourable outcomes, such a notion may seem reasonable. Indeed, language along these lines has been written into federal and state health policy documents in the United States. However, on closer analysis, such a delimitation of SDM becomes less satisfying. For example, who decides whether the likelihood of harms versus benefits, given the quality assessment of the research evidence supporting such estimates, constitutes 'equi-

poise'? Is the determination made by proxy, for example, by clinical guideline committees in the absence of adequate representation from patient stakeholders, or by the actual protagonists to decisions in the actual contexts within which they occur?

Troubling as is this dilemma, there is a still deeper issue. Shared decision making constitutes one decisional mode but does not itself encompass all aspects of relational process, a fact that has been emphasized by developers of the SDM construct [38,39]. Constructed clinical relationships may transform, evolve and traverse multiple relational modes. A compelling demonstration of this has been shared in a published self-reported case [40]. A young, previously healthy, male academic contracted a life threatening viral pneumonia. In the course of elaborating details of the relational process between himself and his clinician team, the author describes an initial, adamant, insistence on his own autonomy over decision making and refused mechanical ventilation. As his disease progressed, he describes awareness of transition to a strong preference for practitioner dominance in decision making and of relief as the doctors proceeded to prepare to place him on a ventilator. One can, perhaps, view this anecdote as a case of shifting equipose between options. However, neither the options nor the stakes changed in the course of its evolution. Hence, it illustrates how principles of relational process may override issues to do with the mode of decision making.

Such an inference is supported by studies of patient preference for relational style. Dowsett *et al.* [41] showed videos of doctor-patient interactions to former breast cancer patients and family members. Subjects viewed videos reflecting practitioner-centred and patient-centred interview styles, with the interviews covering diagnostic, therapeutic and prognostic issues. The preference for style varied widely and differed by action class, relation to patient and severity of prognosis. Interestingly, although, when surveyed, almost all subjects stated preference for at least some involvement of the patient in decision making, the preference for a patient-centred style was a maximum of 88% and was as low as 37% in some combinations [41]. These results contrast with those of Little *et al.* [22] who observed very high patient response rates when presented with survey questions such as 'Do you want your physician to be interested in what you want to know', and 'Do you want your physician to understand your main reason for coming.' The disparity in the observations reported in these studies, among other things, suggests that relational factors override the importance of simple transactional aspects in patient perceptions and experiences of care. This also perhaps highlights the essential importance of Polanyi's articulation of the tacit dimension [11] to interpreting observations regarding the social processes of health care.

RCC: an antidote?

Relational process is an active principle, not just an epiphenomenon of communication of information. As such, this vision mirrors the narrative construct described by Charon [42,43]. It moves beyond the attentive, 'fact-finding', phase of clinical interactions to the dynamically relational phases of representation and affiliation. By embedding itself in an epistemologically viable philosophical tradition, RCC is potentially advantaged over previously elaborated clinical constructs with respect to avoidance of reductionist pitfalls. Its promise extends to other domains of health care as well. The relevance of the RCC construct to a variety of

health care applications was explored in the course of a 2004 conference dedicated to development of a research agenda for RCC and sponsored by the Regenstreif Institute. Subsequent papers published in the *Journal of General Internal Medicine* [15] and elsewhere explored several potential extensions of the concept. We will review these perspectives, with relevant elaborations, and then proceed to some extended discussion and conclusions. We will be guided by the recognition that the philosophical currents identified in the RCC 1994 report [4] cohere with those relevant to issues of clinical policy and implementation within the health care system.

Reflective practice and RCC

The 1994 Task Force report endorsed a notion of professional skill and expertise going beyond the purely technical [4] and referenced the writings of Donald Schon in that context [12,13,44]. Schon drew on Polanyi's notions of tacit, in addition to explicit, knowledge in defining and addressing problems [11]. The tacit, experiential, dimension is ubiquitous. It constitutes the realm within which all interactions, deliberations, decisions, and shared experience resides. It is, so to speak, the 'ether' of social process, that is, the tacit dimension constitutes the medium within which interactions that otherwise appear to involve only two individuals are informed by a myriad of prior interactions in multiple contexts involving individuals representing a broad spectrum of relationships, from family to friends to colleagues and superiors. Hence, Polanyi's concept allows one to move beyond simple models of the practitioner-patient relationship to the domain of team-based and coordinated care.

Schon recognized the relevance of Polanyi to understanding the workings of professional expertise and the inherently social nature of such expertise. Safran *et al.* [45] explore the relevance of RCC to professional collaboration and, implicitly, consider it to hold the key to trans-professional and multidisciplinary care coordination. That is, by elevating relational principles above fixed rules of professionalism, fragmentation of efforts across silos of expertise can be traversed, care can be coordinated and the effectiveness of health care resources maximized. The implication of these inferences is that, given the conceptual affinity between RCC and the principles of reflective practice, the former can serve to reinforce and facilitate the goals of the latter.

Nursing professionals have consistently been receptive to organized applications of relational concepts, including reflective practice, RCC and related theoretical frameworks [46-48]. The US Magnet accreditation system for excellence in nursing care requires an identified framework [49]. Jean Watson, a member of the 1994 Task Force [4], contributed 'caring theory', a construct bearing close affinity to RCC [50], to this aspiration. In pursuing social, organized, approaches to professional practice, nursing professionals are aligned with the principles of Schon, RCC and also the Balints. Balint groups, widely explored within US and UK family practice programmes in the 1980s and 1990s [51,52], afford participants with socialized opportunities to share the experience of care at the same time they share its particulars. Modelled in important ways on the Balints' original project with British general practitioners [5], these family practice groups use techniques that mirror those of psychoanalysis and that included routine consideration of practitioner feelings about the patient

being presented, their interactions and communications. Hence they can be seen as extensions of the relational precepts of the original Balint project.

RCC and organizational function

The importance of collaborative process cutting across disciplinary silos such as medical staff and nursing is becoming more and more appreciated in the health education and health services literature [53]. Safran *et al.* [45] suggest that the importance of transdisciplinary 'practitioner to practitioner' relationship, as recognized within the RCC construct [4], can be understood as extending to the domain of social relationships and collaborations within health care organizations. They suggest a new descriptor, 'relationship-centred care organizations', and, after consideration of practice-based applications of social and relational principles, they describe a model of organizational functioning that emphasizes relational principles within a complex adaptive system framework encouraged and nurtured by what they envision as 'inquiry-centred leadership' [45]. Reference to organized reflective activities is strongly suggestive of the reflective practice concepts of Schon *et al.*, although the latter are not directly cited. Safran *et al.* connect their approach to emerging concepts of organizational theory, including learning organization theory [54,55].

The concept of a learning organization was originated by Argyris and Schon [56]. It followed on the heels of an earlier collaboration [57] the fruits of which Schon would eventually develop into the principle of reflective practice [12,13,44]. A defining feature of Argyris and Schon's organizational vision is that of 'double loop' learning, which goes beyond learning relevant to day-to-day, rule-based operations and addresses processes that lead to change and improvement. Hence, 'double-loop' learning is potentially aligned with Schon's reflective action principles. Argyris and Schon's 1978 elaboration has been criticized as inadequate. Nonaka *et al.* [58] relate it to planned action theory and see the concept of learning organization in a fashion analogous to much of today's knowledge translation literature. They suggest that Argyris and Schon's vision ultimately leads to dependency of organizational change on external inputs, as opposed to what they see as internal transformation through what they term 'organizational knowledge creation' [58]. As with 'patient-centred care', 'learning organization' theory has been substantially diluted in the health services literature relative to the original vision. A 2009 US Institute of Medicine report [55], an offshoot of an 'evidence-based medicine round table' project, makes no mention of Argyris and Schon or of principles related to reflection or to relationships but rather focuses exclusively on matters to do with quality improvement programs based upon data acquisition and monitoring and of research design.

Some authors have recognized the existence of elaborations of organizational theory that explicitly acknowledge and are based on the epistemology underlying RCC [59-61]. Greenhalgh *et al.* [59-61] finds Polanyi's principle of tacit knowledge [11] to be central to the use of knowledge to enrich organizational function and related to the organizational learning theories of Nonaka [58,62]. Nonaka, a Japanese organizational theorist, developed a theoretical framework for the purpose of accounting for the success of leading Japanese companies in competing within adverse eco-

conomic environments in the 1970s and 1980s [58]. In so doing, he sought a synthesis of Eastern philosophical tradition and the epistemology of Western science in a quest that brought him into alignment with the concepts of neuroscience developed by Francisco Varela [63] and the previously cited work of Polanyi [11]. Nonaka's theory of organizational knowledge creation revolves around the concept of bidirectional transformations between tacit and explicit knowledge categories. Institutional creativity is enhanced when the social processes within an organization maximize integration of externally transportable, explicit, knowledge together with internally socialized, tacit, operational knowledge and know how. This requires, in turn, emphasis on enhancing relationships, dialogue and group process within the different layers of an organization, particularly between middle management and both upper and lower strata, a 'middle-up, middle-down' concept. Successful Japanese companies periodically institutionalize intense socialization and deliberation across management and operational layers of the organization in the form of special retreats [58], sometimes called 'Kaizen's', during which special kinds of cross-sectional 'brainstorming' takes place. Such functions might be conceptualized as an expanded form of 'reflective practice' groups [46], and to similarly conform to the vision offered by Safran *et al.* [45] as organizational applications of the RCC construct. The work of Nonaka, and of learning organization theory, has been acknowledged in the medical literature with varying degrees of appreciation of its unique epistemological premises [54,61,64]. Some authors stop at contrasting the relatively decentralized processes described by Nonaka to traditional hierarchical, or 'top-down', management frameworks [54]. Recognizing alignment of epistemological orientations makes it possible appreciate the close affinities between constructs emerging within different domains and fields, for example, organizational knowledge creation [62], theories of professional expertise [57] and the nature of interactions between health care professionals and patients [4]. Such recognition, in turn, creates the potential for conceptual exchanges between otherwise disparate dimensions, all of which are essential aspects of the health care system, and for generating actionable realizations of concepts and approaches that may otherwise remain incomplete.

RCC as a research paradigm

Complexity, self-organizing adaptive processes and the multidimensional nature of relationships and human interactions are inherent precepts within the RCC construct [65]. The Pew-Fetzer Task Force rejected simple mechanistic notions of disease, the exclusion of social and psychological issues from the proper agenda of medicine and health care and, more generally, the mind-body dualism pervading Western philosophy and science [4]. They aligned themselves with the emerging science of self-organizing systems and corresponding approaches to evolution, neuroscience, biology, cybernetics and social organization [11,61,63,65,66], and parted ways with holdovers from the positivist era such as 'evidence-based medicine' [67].

Suchman reviews the premises underlying the RCC construct and identifies several ways in which standard understandings of health care interactions reflect reductionist and inadequate simplifications of relational principles. Of particular interest among these standard premises is the assumption that health care relationships

may be reduced to issues of communication which, in turn, can be understood in terms of transfer of information [65]. Related premises identified by Suchman are that relational behaviour is exclusively intentional, involves attitudes and perceptions that are fixed and that such behaviour is bound by principles of linear causality. We have seen how the concept of shared decision making has been understood and developed from the standpoint of such premises. A large proportion of literature, including publication research inquiries, on shared decision making and knowledge translation has been based on the premise that patients and practitioners reside in non-intersecting communities and that aides to decision making, including clinical guidelines, should be developed in a 'value-free' framework with patient values being acknowledged but regarded as sources of bias [34]. Following this principle, research designs have separately surveyed patient and practitioner attitudes and perceptions in the context of clinical interactions. A more advanced approach recognizes a relational dimension, but in a limited fashion. That is, the 'dyadic' relationship between patient and practitioner involves multiple channels of communication and impact, considers agreement and lack thereof between patient and practitioner perceptions, and seeks to discover the values underlying the perspectives at play in decision making rather than to avoid them [34,68,69]. Interestingly, the dyadic alternative is described in these publications as 'relationship-centred' without explanation or citation of the RCC source literature. Although not as impoverished as the 'KT/EBM' [70] perspective, the dyadic model nonetheless falls short when viewed from the standpoint elaborated by Suchman [65]. Specifically, it does not move beyond the domain of information transfer and instrumental decision making. Rather, it avoids the complex relational context within which even dyadic interactions take place and fails to accommodate the likelihood that relational perspectives and perceptions evolve and transform in the course of even a single clinical encounter.

Research on relational issues has largely restricted itself to the cognitive domain and has focused on developing and psychometrically validating questionnaire and survey forms. Using the dyadic model [34], Legare *et al.* [69] administered previously validated questionnaires simultaneously to doctor-patient pairs and looked for elements with similar factorial structures and other psychometric properties across both classes of respondent. They defined these as potentially useful dyadic, or 'relationship-centred', scale components. Elements that qualified under this analysis pertain to values clarification, verification of information, perception of control and assessment of patient uncertainty. Those that did not included defining the clinical problem, presenting options and pros and cons of choices, discussing patient self-efficacy and drawing on the doctor's knowledge [69]. What seems most pertinent to ask about this kind of research is not so much its design as its interpretation. Legare *et al.* [69] propose that the measures that were validated as 'dyadic' elements be favoured for use in research on shared decision making. This is a challengeable conclusion. Suchman elaborates the complex adaptive nature of even dyadic interactions and stresses how relational process may transform in unpredictable ways in the course of a single interaction [65]. A truly 'relationship-centred' approach to research on patient-practitioner interactions would mandate as much attention to areas of discordance in dyadically measurable parameters as to those that fit neatly into a psychometric model. For example, the

observation that patient and doctor responses to issues pertaining to defining the health care problem are incommensurable would, from this standpoint, emerge as far more interesting than elements of agreement regarding information exchange. Such an approach might need to employ approaches to research that break out of the mold of quantitatively 'pure' methodology.

Quantitative research approaches to non-linear, complex contexts exist. Realist synthesis [71,72], draws on the concept of critical realism originally developed by Roy Bhaskar [73]. It is premised explicitly on the rejection of the primacy of linear causality in understanding of complex processes and of positivism [73]. At the same time, it does not reject the importance of causal laws at play in the context of such processes [73]. Rather, it emphasizes interpretive approaches to understanding the 'how' and 'why' of complex processes based on specific hypotheses, which themselves may be subject to modification in the course of the process [72]. It avoids seeking simplistic linear causal explanations for outcomes. The realist synthesis approach has been taken up and explored within health services research in the area of quality improvement, dissemination and implementation [74]. It would seem to be aligned with the premises of RCC and to be potentially applicable to any context characterized by complex social processes, including the development of health care recommendations and clinical interactions between patients and practitioners.

The challenge of studying health care delivery and design from the standpoint of the RCC construct goes beyond standard issues of study design and methodology. It is, of course, inherently inappropriate to attempt to reduce the experiential, tacit, realm of human experience to that of the measurable and observable. Rather, the manipulations and analyses that generate interpreted observations for the purpose of informing health care policy and of maximally impacting health care outcomes need to be fashioned in a way that recognizes the potentially decisive role of the experiential domain in shaping such outcomes. This is the foundational principle underlying the phenomenology of Merleau-Ponty [10], the epistemology of Polanyi [11] and the approach to complex systems reflected in the work of Varela [63] and others. The RCC construct and the pursuit of a research agenda based upon it [15] usefully highlights the nature of the challenge in contemporary terms. To date, few research teams appear to have appreciated the extent and scope of this challenge. Kelley *et al.* [1] recently summarized research that aimed to demonstrate impact of patient-centred relationships on health care outcomes. However, the great majority of included reports did not go beyond the monadic approaches to assessing relational parameters rejected by Legare *et al.* [69]. One study [75] included in Kelley *et al.*'s review mirrored prior research by Kaptchuk *et al.* [76] in investigating a 'dose-response' relationship between intensity of interaction and patient outcomes in a design reminiscent of the Balints' original concept of the 'dosing' of the practitioner [5].

RCC and evidence-based medicine

Integration of agendas between RCC and the evidence-based medicine movements was an explicit component of the proposed research agenda for RCC [15]. Such aspirations cohere with those of other disciplines aimed at illuminating the experiential dimensions of health care, such as the mindfulness movement [48,77–79] and narrative medicine [77]. The need for such a reconciliation

is highlighted by the adversarial relationship that has pervaded much of the literature since the EBM construct was introduced [28,80,81]. EBM advocates have generally sought to avoid the issues by denying that they exist [82] or by proposing that mere acknowledgment of the existence of patients, values and clinical circumstances constitutes an adequate concession and solution [83]. RCC helps illuminate the depth of the challenge facing such reconciliation at the same time it recognizes its necessity. The RCC literature does not explore or provide specific guidance for how such a reconciliation might be achieved. One published model, framed from virtually identical epistemological premises as RCC, and drawing on constructs derived from narrative medicine [42], proposes a necessary subjugation of the domain of information literacy and gathering of empirical observations to a relational field, with the latter being understood as extending beyond dyadic interactions, even in the context of encounters between practitioners and patients [43,84]. The approach found it necessary to move away from the notion of 'evidence-based' and towards one of 'scientifically informed', a conclusion that has also been reached by developers of applications of realist evidence synthesis to health care problems [74].

Weaknesses in the RCC construct and of this commentary

The RCC construct, as elaborated to date by its advocates, has many limitations, some of which are intrinsic and others of which are external to its development. RCC authors characteristically reflect brilliant appreciation of its applicability and generalizability, but fall short on practical operationalization [85]. Also, although its strong point is the explicit alignment with constructivist philosophy, complexity theory, the writings of Polanyi and Merleau-Ponty and Donald Schon, other important affinities, including to the writings of Varela, Nonaka, Pawson and other critical realist authors, as well as to the original writings of the Balints, have either been ignored or only marginally recognized. The research agenda, sought for [15] and initially explored [65] in the context of the aforementioned conference proceedings, has not been explored in depth, nor has RCC offered an adequate critique of published research on PCC, shared decision making and other centrally related issues. Finally, the RCC concept, although influential, has not enjoyed the extent of uptake experienced by the 'patient-centred' counterpart. The reasons for this are unclear but are not attributable to lack of dissemination efforts on the part of its originators. One possible hypothesis is that, precisely because it was so rigorously elaborated from the outset, it was less amenable to being converted into an all-purpose marketing label.

We have not explored the interconnections between RCC and epistemologically related constructs in depth. For this and other reasons, we are not offering RCC per se as an antidote to the many disconnects that are identifiable within the health care system. Rather, because it poses a provocative counterpoint to a virtually ubiquitous concept within the health care system, 'patient-centred care', and because its content at the same time reflects powerful and undeniable roots in the original published formulations of that concept, we find it to be an extremely useful window through which the challenges and issues posed by the complexity of health care today may be illuminated. We have not explored many

domains, such as information technology [86], as well as extended work on mindfulness as a training modality potentially conducive to reflective practice [48,78,87].

Conclusions

At the outset of this commentary, we painted a picture of the actual complexity of health care delivery today within a highly regulated environment as it is characteristically experienced by practitioners in highly resourced environments. A commonality of all systems and contexts is likely to be an inability to return to a lower level of complexity. We have seen that the concept of PCC, so promising at the time it was originally introduced, has become fragmented into a set of unrelated and frequently incompatible constructs [24]. We have explored aspects of the RCC construct in this context and have demonstrated several ways in which its elaboration with explicit connection to a defined philosophical and epistemological framework makes possible recognition of potentially powerful affinities with compatible constructs in other health care domains. These include organizational theory, the principles of reflective practice and quality improvement, health services research and interactional domains such as shared decision making and narrative medicine. Our objective has not been to offer RCC as the solution to the contemporary ills of health care but rather as a relevant platform for illuminating the nature of such solutions as well as their potentially fruitful grounding on a common epistemological foundation. Such an approach is, in principle, capable of unifying the conceptual fragments that currently comprise the notion of ‘patient-centred care’ in satisfying fashion. Enlightened and compatible research methodologies may, in turn, enable the rewards and benefits of such approaches to become observable and reproducible.

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