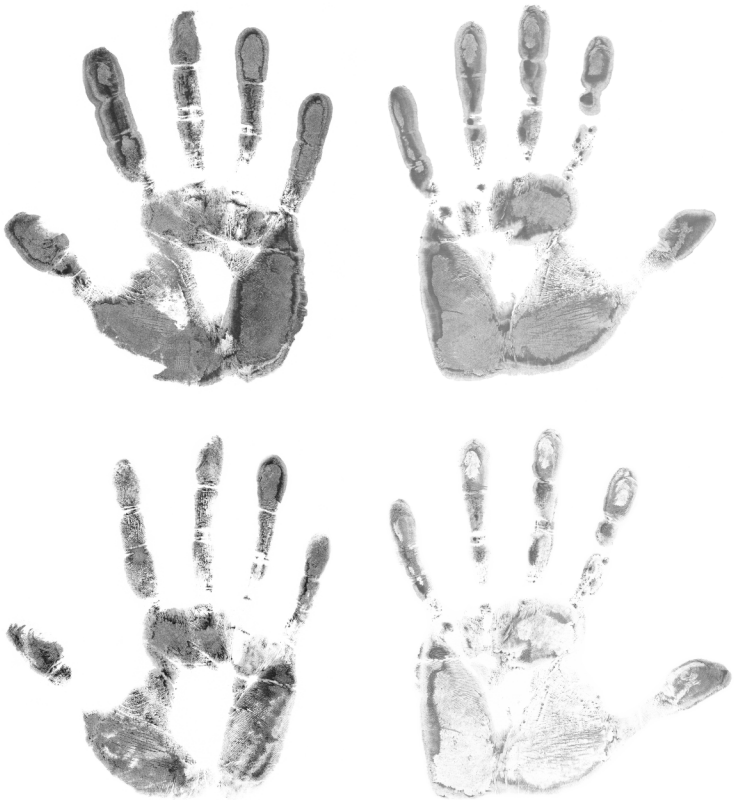
Manipulating practices

A critical physiotherapy reader

Barbara E. Gibson, David A. Nicholls, Jenny Setchell and Karen Synne Groven (eds.)



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CHAPTER 12

Physiotherapy at the intersection between standardization and individual adaptation

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Abstract

Drawing on the phenomenological tradition, contemporary physiotherapy practice may be understood as an embodied experience; one that requires *standardized* approaches to evidence-based examination, treatment, and evaluation while simultaneously requiring *adaptation* of each of these elements of practice to individual patients. Drawing on material from a study of encounters between physiotherapists and patients, this chapter addresses how the work of reconciling the needs for standardization and adaptation is accomplished in physiotherapy practice. The research approach and analysis of the material draws on a number of scholars in the phenomenological tradition, beginning

with Maurice Merleau-Ponty. The study illuminated the ways in which both explicit and tacit forms of knowing are brought together in the physiotherapy encounter. Physiotherapists use explicit knowledge primarily as a framework for thinking about assessment and intervention; however, it is the inter-subjective, communicative practice of being-with-another from which the therapeutic encounter draws its power. It is this being-with-another that enables the physiotherapist to adapt abstract, explicit knowledge for the individual with whom they co-construct physiotherapy care. The study revealed how the knowledge put into play in physiotherapy depends on the sensitivity and reflective embodied knowledge of the physiotherapist, and their bodily style and developed professional skills. This is the bodily style that in some way transforms the therapist's relation to the world, and especially to various and creative ways of knowledge translation at different moments in the process of practicing physiotherapy.

Introduction

> *An epistemology of physiotherapy practice that can justify and legitimize the sources of knowledge that underpin the inter-subjectivity of interpersonal relationships as well as the proven use of physical interventions in effective practice has not been fully explored or defined (Edwards & Richardson, 2008, p. 185).*

This opening quotation summarizes a longstanding challenge in physiotherapy that represents an important tension in the broader literature on evidence-based practice in the health professions. The tension is between the instrumental, rational thought that accompanies an experimental approach to generating and using research evidence in clinical care, and the interpersonal, lived experience *through which* practical knowledge is

generated and put to use. In conceptual terms, these two ends of the spectrum of clinical knowledge can seem impossible to reconcile. However, one point is clear: many physiotherapists *can* and *do* reconcile these different forms of knowledge in their clinical practice every day. But how can we describe this reconciliation? What are these physiotherapists *actually doing* as they integrate explicit, scientific knowledge with tacit, experiential knowledge in their practices?

Our chapter addresses these questions by drawing on parts of the material from a study of encounters between physiotherapists and patients. The research approach and analysis of this material draws on a number of scholars in the phenomenological tradition in order to articulate the ways in which different forms of knowledge are embodied in clinical encounters. Specifically, we use the concept of "embodiment" to examine the roles of knowledge and interaction, incorporated through the body, into physiotherapy practice. Physiotherapy offers a unique and, we believe, particularly insightful example of the integration of different ways of knowing in practice. This is because physiotherapy relies on the body of the clinician, and the physical interaction between the bodies of the patient and the physiotherapist, *in explicit ways* (e.g., physical cueing while a patient learns a new motor skill). Such explicitly embodied modes of intervention provide ideal grounds for exploring the role of the body in the enactment of different kinds of knowledge in practice. Examining the embodied nature of knowledge in physiotherapy thus provides an entryway into commentary on different forms of knowledge-in-use more generally in the health professions.

The specific conceptual challenge that we hope to address may be summarized as follows: contemporary physiotherapy practice is an embodied experience, often arising from *standardized* approaches to evidence-based examination, treatment, and evaluation which

need *adaptation* to individual patients. The specific question we address is then, "how is this work of reconciling the needs for standardization and adaptation accomplished in physiotherapy practice?" In order to elucidate this question, we first summarize select arguments from the literature on evidence-based practice. We then describe the study methods and specific phenomenological perspectives that informed our analysis. We then present two excerpts from the data and analysis interwoven with phenomenological commentary to illuminate responses to our overarching question, and finish with future directions for this important question.

Prevailing and prominent perspectives of the knowledge at stake in physiotherapy

During recent decades, research within the field of physiotherapy has grown substantially, and has predominantly been based on bio-physiological and biomechanical perspectives that focus on the development of standards regarding treatment (such as "best practice" guidelines) and the assessment of "outcomes" for patients (Nicholls & Gibson, 2010). This growth in research and guidelines raises as many questions as it provides answers. Important questions include the overarching issue of what evidence-based practice means in the context of physiotherapy care, and what are the implications for the epistemologies that underlie physiotherapy as a professional discipline? We begin to address these questions in our review of select arguments from literature on evidence-based practice.

Evidence-based practice (EBP)

The claim for the superiority of evidence-based practice (EBP) is fundamentally inspired by the idea of evidence based medicine

(EBM), which is said to be the parent discipline of EBP (Nicholls & Gibson, 2010). There continues to be a transfer of ideas about evidence and quality of services originating in medicine and spreading into areas not only within health, but also fields like education, social work, management, policy and many others (Bouffard & Reid, 2012; Greenhalgh & Russell, 2009; Standal, 2008; Rousseau, 2006). This has led to an ongoing debate about whether or not the principles of "evidence based everything" (Fowler, 1997) can be imported from medicine to such a variety of other domains (Standal, 2008). We think it is timely to critically examine the importance and significance of applying EBP to physiotherapy and the possible impact on professional practice and research within this field.

EBM, its transmission, and evidence-based physiotherapy

The term "evidence-based medicine" was coined in 1992 by a group of academic physicians at McMaster University in Canada, who claimed that EBM constituted a new "paradigm for medical practice" (Sackett & Haynes, 1995; Mykhalovskiy & Weir, 2006). The basic premise of the EBM approach is now well rehearsed: that medical practice should be based on the conscientious and judicious application of best available research evidence to decision-making regarding clinical care (Sackett, Rosenberg, Gray, Haynes & Richardson, 1996). Although EBM further developed to purportedly incorporate patient preferences and the clinician's experience, a number of authors suggest that these additional dimensions clearly occupy a lower priority for decision-making in EBM education and practice (Hammel & Carpenter, 2004; Goldenberg, 2006). The primary reason for this devaluing of the personal dimensions of clinical practice arises from the particular philosophical views

bound up in EBM (Hammel & Carpenter, 2004; Grypdonck, 2006; Goldenberg, 2006).

The EBM movement quickly spread across a number of fields, as stated above, leading in health-related literature to a broader conceptualization of "evidence-based health care" (Grypdonck, 2006). The success of the evidence-based health care (EBHC) movement may be attributed to a variety of causes. Grypdonck (2006) outlines three important reasons. The first is that the definition retains a great deal of room for interpretation, as the three elements of best evidence, patient preferences, and clinical experience may be understood in widely different ways. The second is that the approach offers the perception of greater certainty in the decision-making process, which acts as a protection for the decision-making clinician. The third and final reason is that EBHC allows for the objectification of suffering, which creates an impersonal distancing between the clinician and the patient. Other authors add that the power of the medical discourse in influencing thought in a wide variety of other fields is a key reason for the rapid dissemination and popular growth of EBHC (Mykhalovskiy & Weir, 2006).

The profession of physiotherapy was relatively quick to take up the evidence-based discourse, despite the challenges inherent in experimental research designs for physiotherapy interventions (Jette & Haley, 2005). This may relate to the profession's close alignment with medicine and its general commitment to a positivist perspective (Hammel & Carpenter, 2004).

A growing body of research in physiotherapy examines the skills and knowledge that physiotherapists require to adopt more evidence-based practices, illuminating barriers and facilitators to achieving a more evidence-based approach (Salbach, Jaglal, Korner-Bitensky, Rappolt, & Davis, 2007; Shaw, Connelly, & Zecevic, 2010). Research promoting the use of more evidence-based approaches has tended to take for granted the philosophical

beliefs and ultimate value of the broader EBHC perspective, neglecting to consider whether and how the EBHC approach might conflict with physiotherapy care. However, recent literature has begun to challenge the assumptions of EBHC within the physiotherapy profession (Bjorbækmo & Engelsrud, 2011; Shaw & DeForge, 2012; Smith, Sparkes, Phoenix, & Kirkby, 2012). Some authors have pointed out the need to include qualitative research along with randomized controlled trials if all of the dimensions of EBP are to be brought into the rehabilitation encounter (Hammel & Carpenter, 2004; Carpenter & Suto, 2008). Drawing on literature in both physiotherapy and the broader EBM/EBHC domains, we now provide a brief overview of the philosophical assumptions that we believe need to be further challenged and explored. These assumptions primarily relate to issues of epistemology and the application of knowledge in practice.

Epistemology in EBHC

Anjum et al. (2015) have suggested that criticisms of EBM have tended to focus on one of two key points: either (1) the *epistemology* or (2) the *mechanics* of the evidence-based approach to care. Epistemologically, EBHC is widely recognized as a positivist-informed perspective that orients its inquiry toward the identification of generalizable truths. Mechanistically, this has meant embracing the value of experimental design and the hierarchy of research evidence, in which meta-analyses of randomized controlled trials are at the very top (Morse, 2005; Sackett et al., 1996; Sackett & Haynes 1995). The randomized trial is regarded as the arbiter of causal association, allowing professional disciplines access to the probabilistic knowledge of what causes particular ailments to occur and which clinical interventions can alter the course of disability and disease (Sehon & Stanley, 2003). Embedded in

this perspective is thus a particular type of knowledge about causation, characterized most basically as "explicit" knowledge, and the general lack of recognition of more "tacit", experiential ways of knowing.

The distinction between tacit and explicit ways of knowing provides a useful heuristic for thinking about the tensions between standardized approaches to treatment in physiotherapy and individualization for patient needs (although we acknowledge that the question of generalizable knowledge extends well beyond the issue of tacit versus explicit knowledge). Polanyi (1967) popularized the distinction between these forms of knowledge by bringing together literatures from both psychology and philosophy. He explained that explicit knowledge is that knowledge which can be stated aloud or written on a page, such as "factual" knowledge, for example, of the muscles of the body. Conversely, tacit knowledge exists within the body differently, and can generally not be written or stated in satisfactory ways. Tacit knowledge is represented by such activities as riding a bicycle, or applying the right amount of pressure during active assisted stretching of a particular patient in physiotherapy care. These are "felt" and "practiced" activities as opposed to those that can be entirely learned in a classroom.

The implications of the tacit-explicit distinction for EBHC have been addressed at length in the literature. A now classic study examining the extent to which medical practice is "evidence-based" identified that clinicians followed "mindlines" as opposed to evidence-based guidelines in their care (Gabbay & le May, 2004). These mindlines represent the tacit dimensions of enacting medical care, defined as "collectively reinforced, internalised tacit guidelines" based on professional networks and clinical experience (Gabbay & le May, 2004, p. 3). Mindlines are not portrayed by these authors as something that need to be combated, but as a central source of knowledge related to enacting medical care.

Similarly, Thornton (2006) suggested that tacit knowledge is the conceptual link that connects the three elements of EBM (best available evidence, clinical experience, and patient preferences). In this sense, tacit knowledge enables the clinical judgment that informs decision-making about medical care (Thornton, 2006). The shift from a focus on explicit, scientific knowledge toward a more concerted effort to understand the ways in which different kinds of knowledge are brought together has led to a stronger focus on *the practice of clinical judgment* in EBHC (Engebretsen, Vøllestad, Wahl, Robinson, & Heggen, 2015; Greenhalgh, Howick, & Maskrey, 2014). In this sense, expert clinical judgment occurs when "rule following gives way to expert judgments, characterized by rapid, intuitive reasoning informed by imagination, common sense, and judiciously selected research evidence"(Greenhalgh et al., 2014, p. 3). However, key questions about the ways in which these processes unfold still remain.

The literature summarized above on clinical judgment as a means to bring together tacit and explicit forms of knowledge provides the starting point for our work. There remains little empirical examination of the ways in which clinicians *actually* bring these forms of knowledge together in practice in physiotherapy, navigating the tension between (more explicit) standardized, evidence-based principles and (more tacit) individualized, personalized approaches to care (Engebretsen et al., 2015). We help to address this gap with our phenomenological investigation into the practice of evidence-based physiotherapy.

Methodology

Methodology refers to the theory behind the method, including the study of what method to follow and why (van Manen, 1990). Our study was approached from a phenomenological perspective

and methodology (Finlay, 2009; van Manen, 2014). Before giving an account of the theoretical perspective and method, we provide a short presentation of the research context.

The current study is a sub study within a larger research program the main purpose of which has been to develop a program of research and build capacity to investigate primary care[1] physiotherapy in Norway[2]. The regional committee for medical research ethics approved the project.

The aim of the present study was to examine what individually adapted physiotherapy is about. Specifically the aim was to gain insight into how physiotherapists experienced tailoring therapy to the individual, and how patients experienced the therapy they receive. The participants (nine physiotherapists and nine patients) were recruited from five clinics in two parts of the country. The physiotherapist participants had several years of work experience, including settings of manual therapy, ergonomics, and other outpatient primary care. All participating patients suffered from long lasting neck problems, defined as muscle-skeletal problems that had lasted for more than one month (inclusion criteria set by the research program). In this chapter, we report findings from physiotherapist data only.

Phenomenological perspective

The phenomenological perspective for this study was informed by the work of Merleau-Ponty (2005), which entails seeing human

1 Primary care physiotherapy involves physiotherapy provided at municipal level by either a private or public practitioner.

2 The program has three main aims: 1. through research create new knowledge about clinical practice. 2. through the development and testing in clinical practice establish methods and tools for systematic and standardized recording of data, relevant for clinical practice. 3 through testing different models of cooperation between clinicians in primary care and researchers create a basis for enduring collaboration environments.

existence as a personal, relational and always situated bodily existence. Of particular significance is the recognition that we both *are* and *have* a body -- which means that we always are both subject and object, never either /or. This duality and ambiguity of our existence in the world is described by Nancy as an existence of always being "singular plural". He writes: "Being cannot *be* anything but being-with-one-another, circulating in the *with* and as the *with* of this singularly plural coexistence" (Nancy, 2000, p. 3). In line with Nancy, Merleau-Ponty (2005, p. 530) has stated: "Man is but a network of relationships, and these alone matter to him(sic)".

Within a phenomenological perspective, the only way to understand the function of the living body is by enacting it oneself. As bodily beings situated in a physical and social world, it is always the body that understands and experiences meaning (Merleau-Ponty, 2005). Merleau-Ponty (2005, p. 213) names as "ready-made-meanings" the dominant ways different phenomena are understood and talked about within a certain society and culture at certain times. Such "ready-made-meanings" are pre-understandings, the discourses that constitute the general understandings of a phenomenon at a defined historical time and place – for instance the phenomenon of evidence-based practice is from a health-political perspective considered representing what is best practice.

Method

Phenomenology is best suited to investigating meaningful aspects of lived experience (van Manen, 2014). When examining lived experience, the intent is to explore directly the originary or pre-reflective dimensions of human existence from a first-person perspective. In order to produce knowledge from a first-person perspective, specifically, experiences of practicing physiotherapy, the researcher (first author) had to be with physiotherapists in

their practice and to talk with them. The study data were generated based on 16 close observations of the enactment of physiotherapy care, and interviews with nine physiotherapists and nine of the patients/ persons seeking their help.

One-to-one interviews were conducted with physiotherapists and patient participants in separate rooms at the physiotherapy clinics. They were audio recorded and later transcribed into written text. The interviewer's intention was to follow the description of empathic interviewing (Fontana & Frey, 2005) and that of conversational interviewing (van Manen, 1990). Both empathic and conversational interviewing emphasize partnership between the interviewer and the interviewee as a fundamental condition. During the interviews, the interviewer aspired to be open and interested in what the participants said and to encourage them to reflect on those experiences. Since the interviews and transcriptions are in Norwegian, the first author translated the excerpts from the interviews presented later into English.

During the close observations, the first author attempted to be present in the encounters as an interested party and without actively interrupting therapy. In writing notes after each observation, she sought to capture the lived experience of the observed situations rather than merely reporting what had been seen, done and/or said. The observations were conducted prior to the individual interviews with the physiotherapist and patient.

The phenomenon of practising evidence-based physiotherapy

Our participants, and the data co-produced throughout the course of this study, pointed our analysis toward a particular kind of phenomenology. We began the study acknowledging that we would phenomenologically focus on the role of the human body in the

incorporation (etymologically, to "bring into the body") of standardized and personalized approaches to physiotherapy care. The tradition of work done by Maurice Merleau-Ponty was thus an obvious starting point. However, our findings encouraged us to move towards strands of phenomenology that even more explicitly examine the nature of inter-subjective experience and its relationship to the being and knowing *of each individual* (and especially the work of Jean-Luc Nancy). In our case, the individual physiotherapist seeking to provide care in an evidence-based way is the individual in question; however, their experience of providing care cannot be separated from the "patient" co-constructing the care provided.

First example

The experience of Lynett conveys the importance of the inter-subjective experience of enacting physiotherapy care. In her interview, she demonstrated the ways in which she shifts her practices of knowing in order to better understand how "standardized" rules and guidelines (i.e., her explicit knowledge) relate to the individualized human experiences of her patients. This shift represents the lived experience, always constructed inter-subjectively, of enacting evidence-based practice in real-life contexts of care.

When asked about how scientific knowledge is important for the quality of care in physiotherapy, Lynett interrupted to change the direction of the conversation:

> *Yes, [Lynett interrupted] – [But] I think it is a lot about communication -, to listen to the person, to get their picture and understanding of their own situation at the moment, to hear their story, their version is important. I have to understand how that specific person understands her or his own situation and also what they think might help – and what they hope for… And, and I, I spend a lot of time and effort to explain to the individual what I see, think, what I know about the*

> *body, about such pain and the combination of symptoms displayed. It is important; both to listen and to explain.*

In this quotation, Lynett conveys the interactive nature of knowing as a tacit, lived experience in the enactment of physiotherapy care. Knowing, or the epistemology of evidence-based physiotherapy, is first and foremost (for Lynett) about establishing a communicative relationship with her patient. The sharing of explicit knowledge only arises after such a relationship is established. She continued explaining the importance of this communicative relationship with each patient through an example:

> *… Let me give an example. I have two patients, both women, same age and educational level and…. yes,… quite similar lives. Both had received the same surgical treatment for the same kind of knee injury. They both got the same post-operative follow-up program and home program. One of them has followed the home program and done the exercises recommended. The other has also followed the program, but felt it was so painful that she has taken it easy a bit more. How then – How, then, can I use the same approach with both of them?*

Lynett explained that standardized approaches to care can only be understood within the context of the lived experiences of individual patients. Her explanation conveys more than a simple "patient-centred approach"; it represents the basis of an epistemology of physiotherapy care.

Jenny Slatman (2014), who is both a physiotherapist and a philosopher, holds that lived embodiment does not simply involve subjective and individual experiences of one's body; rather, it conditions the meaning of a shared world. She builds her argumentation on the ideas of Merleau-Ponty (2005), who has posited the perceiving, experiencing body as always personal, relational and situated in inter-subjective arrangements (it is *shared*).

The first-person perspective is itself constituted and conditioned by the inter-subjective world it discloses (Slatman, 2014). Slatman states that a first-person perspective on embodied experience cannot be isolated from the *Other's* view of one's body. In the field of health care, and physiotherapy in particular, this is highly relevant. Just as Merleau-Ponty (2005) and Nancy both suggest, being can only be understood in relation to the other human experiences that provide our own individual experience with meaning. The epistemology of evidence-based physiotherapy, therefore, must be based on the primacy of the interpersonal realm as the foundation of being-in-the-world, and hence of engaging in a practice of any kind; or as Nancy (2000) suggests, on "being singular-plural".

In his *Phenomenology of Perception*, Merleau-Ponty (2005) summarizes this latter point with his usual clarity and insight:

> *The phenomenological world is not a pure being, but the sense which is revealed where the paths of my various experiences intersect, and also where my own and other people's intersect and engage each other like gears. It is thus inseparable from subjectivity and intersubjectivity, which find their unity when I either take up my past experiences in those of the present, or other people's in my own (p. xxii).*

The central point to emphasize here is that in order to understand the ways in which physiotherapists reconcile tacit and explicit knowledge in the enactment of evidence-based physiotherapy, we must first understand the primacy of the intersubjective relationship between physiotherapist and patient. By the same logic, we must think more critically about traditional humanist approaches to care delivery (Todres, 2007), which take the individual experience of the patient as their starting point. Knowledge (both tacit and explicit) is the presence of meaning, and as Nancy explains, "there is no meaning if meaning is not shared… meaning itself is the sharing of being" (Nancy, 2000, p. 2). Any understanding

of knowledge as it is mobilized in the physiotherapy encounter must therefore be built upon this fundamental recognition. We now turn to explore the second example, where we gained further insight into the centrality of this intersubjective grounding for the reconciliation of standardized knowledge with individualized approaches to care.

Second example

This example is based on the observations and interview with Catherina. Catherina had been observed in action in three treatment sessions with three different patients. In each observation she appeared to be engaging in similar treatment techniques, and was asked about this in her interview.

Interviewer: I have observed three treatment sessions today and in a way it seems that you have used a quite similar approach in these three encounters?

Catherina: It, it builds on the experience, on clinical experience [She pauses briefly and adds] one has to find one's way...

Interviewer: Even if similar - there was one difference that I particularly noticed today. It was, with the last person; during this session, you asked more than you did of the others - asked this man "how it was" etc.

Catherina: Yes, yes [pause], it was his feedback. It was very, there have been very – it took a really long time before I got him. I felt he did not believe in what we were doing.

Interviewer: How do you notice that?

Catherina: I have to concentrate – try to capture tensions, responses – how what we do is to the actual person – is it Ok, is it uncomfortable,

> or... Sometimes I may ask a bit too much – but it's – it is sort of to get confirmation [pause]. With him I was not sure....
>
> *Interviewer*: I see [pause]. Research does exist that says something about what is recommended as best treatment for people with different diagnoses, ailments and disabilities?
>
> *Catherina*: Yes, of course but, I must adapt and dose differently – must take into account the individual. It is not – by all means – I do not do the same thing even though people have the same functional problem or medical diagnosis. Even if it might look quite similar.

In this excerpt Catherina emphasizes *communication*. In this sense, communication implies listening and explaining (as Lynette explained previously) and also the *wordless communication in touching and moving* expressed by Catherina. She tries to "capture tensions, responses" that help her to better understand the meaning that is co-created between physiotherapist and patient as they both engage in the encounter. This is an inter-corporal communication; an inter-bodily communication in which she seems to be ready to change and try new ways of doing therapy with individual patients according to their response at the moment. Her experiences and reflections show how therapy is always enacted in the present and constantly co-created between therapist and patient. In order to get in touch with her patient she has to concentrate to attune to her patient, and to be ready to change and improvise in her therapy.

The implicit improvisation described by Catherina here, and echoed by other physiotherapists in this study, represents a form of *reflective practice*. Such reflective practices has been addressed in a variety of fields, including education, management and physiotherapy (Sommerro, Steinsholt, & Juul, 2006). In improvisation, each person is viewed as unique and with his or her own specific potentials that become actualized during the encounter. Each individual's potentials are seen not only as valuable, but as decisively

important for the collective in the actual context – in this case, between physiotherapist and patient as they enact physiotherapy care (Sommerro et al., 2006).

The physiotherapists in this study emphasized the importance of what one (Thomas) called "*getting in touch with*" one another, in order to create common ground and an atmosphere in which a therapy process can develop and flourish. This "getting in touch" or "getting on board" as Thomas explained it, demands that the physiotherapist use more than explicit knowledge (i.e., from guidelines and experimental research). These types of explicit knowledge, generally applicable only to populations of patients as opposed to individuals, cannot be simply and linearly adopted in the encounter with an individual patient. Another physiotherapist participant (Georg) labelled this type of explicit knowledge "frameworks", suggesting that a different kind of knowledge is necessary to actually transform a framework so that it is useful with a given patient at a given time.

Discussion and conclusion: What this study revealed

Physiotherapists use explicit knowledge primarily as a framework for thinking about assessment and intervention; however, it is the inter-subjective, communicative practice of being-with-another from which the therapeutic encounter draws its power. It is this being-with-another that enables the physiotherapist to adapt abstract, explicit knowledge for the individual with whom they are co-constructing physiotherapy care. In this concluding section, we provide summative comments on the "bringing together" of these forms of knowledge in the constitution of physiotherapy practice, and provide a call for further attention to ways of better understanding what it means for physiotherapy to be "evidence-based".

In learning to be a physiotherapist, and through practising one's profession physiotherapists refine and develop their professional skills – this means developing embodied knowledge that in different ways transforms their relation to the world. This is a knowledge-based transformation that becomes incorporated into the habitual body and opens up the way for refined and/or new possibilities of acting at a pre-reflective level: knowing what to do in the moment, knowing when to change. "The acquisition of habit" is a "rearrangement and renewal of the corporeal schema". It is "…. the grasping of a significance, … it is a motor grasping of motor significance". Habit is "knowledge in the hands", and it is only forthcoming "when bodily effort is made, and which cannot be formulated in detachment from that effort" (Merleau-Ponty, 2005, pp. 164-166). Human understanding is thus embodied understanding. The two examples presented reveal how *reasoning* in physiotherapy is a bodily activity based on theoretical knowledge, feelings, and embodied habitual physiotherapy knowledge. It is about signifying the inter-corporal experiences in-between physiotherapist and patient.

The primary implication of this work for the practical effort to improve physiotherapy practice and enhance physiotherapy education is this: The profession must acknowledge that standards (such as evidence-based guidelines) are useful as frameworks, but that the most important knowledge necessary to bring those frameworks to life lies in the encounter between physiotherapist and patient. This encounter gives explicit reason *grounding* in tacit, embodied lived experience. The inter-connections between the three components of evidence-based practice (best available research evidence, clinical experience, and patient preferences) remain largely ignored in the literature on this topic. In this chapter, we have begun to unravel the ways in which physiotherapists leverage embodied, relational knowledge-as-practice as they bring these three components

together. Importantly, as we have argued throughout, the "bringing together" of these three components of evidence-based practice constitute a distinct form of practice. These are not simply three distinct ways of working in the world, but constitute instead a new, unified practice. As Gendlin (2004) might say, the physiotherapy encounter is an "unseparated multiplicity". Van Manen (2007) summarized nicely what we believe physiotherapy as a profession must come to understand:

> *What distinguishes practice from theory is not that practice applies thought or concepts technically to some real thing in the world upon which it acts. Rather, the phenomenology of practice involves a different way of knowing the world. Whereas theory "thinks" the world, practice "grasps" the world – it grasps the world pathically (p. 20).*

There is still very much work to be done to understand how physiotherapists grasp the world and how they might become more sensitive and attentive in doing so. We have provided a starting point for thinking phenomenologically about evidence-based practice and the incorporation of different forms of knowledge into practice, in the context of the encounter between physiotherapist and patient. We encourage other phenomenologically-inclined researchers to further explore the *practice* of the physiotherapy profession, engaging in the effort to produce a physiotherapy that is grounded in an understanding of lived-experience, and that gains inspiration from a variety of ways of knowing.

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