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Abstract

Introduction: Empathic physician behavior is associated with improved patient outcomes. One way to demonstrate empathy is through nonverbal communication including touch. To date, research on nonverbal communication, and specifically touch, has been relatively limited in medicine, which is surprising given the central role it plays in conveying affective and empathic messages. To inform curriculum development on nonverbal communication, this study aimed to examine physicians' experiences of communicating with touch.

Methods: Interpretative phenomenological study. Fifteen physicians (7 women and 8 men), from different specialties, both recent graduates and experienced doctors, described in detail specific instances of touch drawn from their clinical practices. Interview prompts encouraged participants to recall exact details such as the context, their relationship with the patient they touched, and their physical experience of touching. Interviews (45-100 mins) were analyzed with template analysis, followed by a process of dialectic questioning, moving back and forth between the data and researchers' personal reflections on them, drawing on phenomenological literature to synthesize a final interpretation.

Findings: Participants described two dimensions of the experience of touch, 'choosing and inviting touch' and 'expressing empathy'. Touch was a personal and fragile process. Participants interpreted nonverbal patient cues to determine whether or not touch was appropriate. They interpreted facial expression and body language in the here and now, to make meaning of patients' experiences. They used touch to share emotions, demonstrate empathy and presence. Participants' experiences of touch framed it as a form of embodied empathic communication.

Conclusion: Touch was a powerful form of nonverbal communication which established human connection. Phenomenological accounts of empathy, which emphasize its embodied intersubjective nature, could be used to theoretically enrich pedagogical approaches to touch in medical education and deepen our understanding of empathy.

Key words: touch, communication, empathy, physician, phenomenology, nonverbal communication, embodiment

Introduction

Good communication skills are fundamental to successful doctor-patient relationships and students spend a significant part of their training learning how to communicate with patients. Traditionally, verbal communication skills have been prioritized over nonverbal communication skills (NVCS) in communication skills training.[1] NVCS comprise body language (such as posture and facial expression), use of interpersonal space, and gestures (such as hand movements or touch) and are particularly associated with emotional and affective communication.[2, 3] A limited number of efforts have been made to enhance medical students' awareness of NVC, in particular attention to use of eye contact, body lean and reading patient's facial expressions.[4-7] Touch as a specific form of nonverbal communication has received less attention. In a recent systematic review of qualitative studies on touch in health care, we identified forty-one studies of which only four examined touch in doctor-patient interactions.[8-11] Three of these were conducted in family medicine[8, 9, 11] and one in a Caribbean medical school.[10] These studies demonstrated that, while physician touch helped establish rapport, and indicated caring and understanding, practitioners often associated touch with risk, particularly in relation to cultural and gender-related boundaries. This is consistent with literature on touch in other health care professions,[12] which characterizes two broad categories of touch: 'procedural touch', associated with physical examination and technical procedures, and 'expressive touch', with a communicative function, which is associated with empathic interactions.[13, 14]

Expressive touch conveys emotion, connection, and humane understanding.[15-17] In a qualitative study of nurses, Estabrooks and Morse described touch as a multidimensional experience, involving 'voice, posture, affect, intent and meaning within a context, as well as tactile contact'.[18] Touch in nursing is described as an embodied experience.[19, 20] Embodiment describes how human bodies mediate everyday life experiences. From an embodiment perspective, an individual's subjectivity and relationship to

others is more than intellectual, including a physical, felt dimension. Empathy then involves not just careful listening but feeling with the whole body. The embodied nature of empathy is reflected in language used to convey it in medicine. A key construct of the Jefferson Scale of Physician Empathy, for example, is the ability to 'put oneself in another's shoes'.[21] The origins of the word empathy is the German term 'Einfühlung', which means 'feeling into' or gently sensing another person while trying to appreciate them.

To date, the link between nonverbal communication, touch and empathy has not, as far as we know, been extensively examined in medical education. To make best use of a complex human attribute like touch, educators need first to understand it, which calls on researchers to 'represent it well'.[22] The purpose of the study was to explore physicians' experiences of communicating with touch. The aim was to deepen understanding and open doors to teaching "touch" in medical education. Our research question was 'what are physicians' experiences of communicating with touch?'

Method

Theoretical orientation

The research took a phenomenological hermeneutic approach.[23] Phenomenology seeks to represent human experience in all its complexity rather than seeking to reduce, parse, or operationalize it. Hermeneutics is the practice of interpretation. The aim of hermeneutic phenomenology is to provide a rich interpretation, which makes visible and enhances understanding of a topic or practice.[24] Benner[19] suggested that the understanding gained in interpretive inquiry is key to "become more effectively, skillfully, or humanely engaged in practice"[19 p.xv] and is a particularly useful approach when one seeks to understand meaning and practices that are often taken for granted and assumed.

Phenomenology views mind and body as inseparable.[25] Perception is neither a mechanical process nor a type of thought; rather, the body 'knows' at a corporeal, pre-reflective level; we understand ourselves not as *having bodies* but as *being* bodies.[25] Our physicality provides a point of view which creates experience of the world,[25] in which self and world are inextricably entwined. Thus, phenomenology offers a philosophy of the body that reflects the relational engagement of individuals with the world. From a phenomenological perspective, empathy is a form of intersubjective understanding, classically represented in Edith Stein's work 'On the Problem of Empathy'.[26, 27] Stein presents empathy as a form of intentionality directed at the experience of the other. Expressive phenomena such as facial expressions or gestures reveal for us the experiential life of the other – we read meaning into these expressions directly. While we cannot experience others directly as they experience themselves, empathy brings us closer to understanding their experience. A simplified version of some of Stein's key ideas are presented in Table 1.

[Table 1 about here]

Setting and participants

This study was conducted in a Canadian medical school and physicians working there were recruited.

Sampling and recruitment

We used a combination of purposive and snowball sampling to recruit participants. To develop a broad understanding of physician touch we invited participants from different disciplines, genders and all career stages. We also sought to interview physicians from different ethnic backgrounds because earlier publications[3, 10, 18] suggest that culture impacts on health professionals' experiences of touch. We identified potential participants by sending an introductory email, outlining the study as follows: "*We are conducting a study examining the role touch in contemporary clinical practice. Touch is part of the*

everyday practice of the doctor; shaking a patient's hand, the intimacy of physical examination, performing procedures. Often however, we may take our day-to-day experience touch, for granted. In this study we wish to solicit physicians' experiences of touch with a view to gaining a better understanding of the role of touch in modern practice." The email was sent to teaching faculty in the medical school, who work in a wide variety of specialties. Some, but not all, participants were known to AA/BB as clinical colleagues. As interviewing progressed, we asked participants to suggest potential interviewees to ensure we included participants from specialties traditionally known as being 'hands on' e.g. pediatrics, palliative care, and 'hands off', e.g. psychiatry, radiology. Consistent with a hermeneutic approach, we judged recruitment to be sufficient when a range of participants had richly described a breadth of informative experiences.[23, 28]

Data collection

Data were collected through individual interviews, conducted by AA, a family physician with experience in qualitative research, or BB, a recent family medicine graduate trained by AA to interview. They took place at locations convenient to participants, usually in a clinical or university setting. The interview guide (Appendix 1) was informed by earlier research on touch in health professions.[8, 14, 18, 29-33]

As the aim of phenomenological research is to gain access to participants' pre-reflective experience, rather than their interpretations or opinions of events, we invited participants to identify specific experiences of touch. This could be any experience they chose. We prompted participants to describe rich details of their experience including the context and physical sensations.[34-36] Interviews lasted between 45-100 minutes and were audio-recorded and transcribed verbatim.

Analysis

We used phenomenological methods to analyze the entire set of interviews, supported by template analysis.[37] We started by reading and re-reading transcripts. AA and BB did this separately, noting initial

thoughts, observations and reflections in the margins of each transcript. This included paying attention to words and metaphors within the text and emotional responses to the transcripts as a whole. We then met to devise a preliminary set of codes and template. Template analysis is a form of thematic analysis, used in phenomenological research, which enables researchers to manage large volumes of textual data. A template is devised in an iterative manner: researchers start by coding a sub-set of transcripts and modify the template as they code subsequent transcripts.[37] Throughout the analysis AA and BB met regularly to code interviews, and review and re-organize the template.

Our interpretive analysis was guided by the phenomenological orientation of the research and our reflexive engagement with the topic.[23, 38] Interpretative phenomenology gives researchers' subjective engagement with data a central place in analysis.[23] To examine our a priori perceptions and make best use of our ability to engage reflexively with the data, we identified and worked through our pre-judgments in a process referred to as 'the hermeneutic circle';[39] a metaphor for interpretative-reflexivity. To help AA and BB's evolving interpretations, EE and CC (experienced phenomenological researchers) read excerpts from the data and initial narrative accounts. They offered alternative interpretations to enhance a collaborative reflexive process. In this way, we considered the parts and the whole nature of the phenomenon as we moved back and forth between field notes, memos, the developing template, and participants' original accounts. We used our template as 'tools to think with'[40 p.32] and developed our interpretations by reading, writing and re-writing[34] to identify two overarching themes, or dimensions of touch. As recommended by Van Manen, we related our developing understanding to phenomenological texts on empathy.[26, 27, 41-45]

Research ethics approval was obtained from the Conjoint Health Research Ethics Board, University of XX.

Findings

Participants

Fifteen physicians (7 women, 8 men) from a range of disciplines and varying levels of clinical experience (see table 2) participated. Their ethnic backgrounds and cultures of origin varied, eleven participants having been born in Canada, and four participants having immigrated to Canada between 6-30 years earlier. Because of the potential to reveal participants' identities, we have not directly attributed quotations to individuals. This is in keeping with a hermeneutic approach, which generally does not seek to conserve individual stories but focuses on the phenomenon under study.[23, 46]

[Table 2 about here]

Dimensions of touch

Participants described two dimensions of touch, which we termed 'choosing and inviting touch' and 'expressing empathy'. To present these findings, we describe what participants related and then situate our interpretation in phenomenological literature.[26, 27, 41-45]

Dimension 1: Choosing and Inviting touch

Choosing

Participants made personal choices about whether and how to communicate with touch. One participant, a psychiatrist, had made a conscious decision never to touch patients. Two other participants rarely communicated with touch. One of them made the choice not to do so because of her religious upbringing: as a female Muslim, she had had no social contact with men outside her family until she moved to Canada a few years earlier. She described getting used to shaking hands with patients and occasionally being hugged by them. At first, she found these experiences uncomfortable although she appreciated they were well-meaning. She did not, however, initiate touch. The other participant, born and raised in Canada, described his choice not to communicate by means of touch:

If somebody is having an emotional crisis or … you're talking about the death of a family member … I've never had an easy time … reaching out and using touch to console … I think I'm empathetic but I don't necessary feel the need to, so I guess I don't use touch as communication (male, > 15 years in practice).

He noted, that while this was his personal decision, and that this practice was re-enforced as he cared for many Indigenous patients, where due to a history of institutional abuse, touch is often reserved for close family members.

The remaining 12 participants had chosen to touch patients communicatively, citing their social circumstances as reasons for doing so: e.g. coming from a 'touchy-feely family'; having a 'more stiff British background'; interacting with their partners or children. This varied greatly, as one participant who choose to touch reflected:

Coming from an Indian background … couples don't really touch each other in public spaces. Maybe it's just the way we grew up here but you touch people's feet when you meet them if they're older… myself and my husband, we do enjoy touch … my sister is very different, she's not as much into that so I don't know if it's the way we grew up or just part of our personality a bit more. (female, < 5 years in practice).

Participants' readiness to touch patients tended to increase with clinical experience. Some early career participants, however, communicated with touch from the outset.

Inviting

Participants were very aware that patients, too, must choose whether to communicate by touch. Touch was, at least at the start, *'a very fragile thing' (*male, > 15 years in practice) amenable to misinterpretation.

I think touch really probably forms the basis of the relationship that one might have with your patients; because it can be a very positive experience or it can be a very negative experience depending on the quality of that touch. (male, < 5 years in practice).

Participants described various strategies to invite communicative touch. Shaking hands was often a first step:

it's about building rapport for the very first time. I am old fashioned. I call patients Mister so and so and Missus so and so, and I walk into the room and I say I am Dr. X, and I shake their hand. And that's the first touch. (male, > 15 years *in practice*).

The invitation to touch had to take account of gender and cultural differences:

Both the patient's culture and the physician's culture (influence touch) … sometimes, middle-aged men or younger men … don't like to be touched and then because I'm male, with younger females, I'm more cautious. (male, 6-10 years in practice).

Invitations to touch had to be sensitive to the context of the patient as s/he presented, in the moment, and were often expressed nonverbally:

I feel it comes more from the patient … it depends on the patient's mood, their approach, their thinking, their attitude as I walk in the door … how you communicate with them, with your body, is essential and it develops from that point, the way that they trust or don't trust you as their physician … I don't feel I can physically touch a patient until I've got their consent, and I don't mean verbal consent, I mean body language consent. (female, 6-10 years in practice).

Not all touch was initiated by physicians. In a number of examples, patients issued the invitation.

I think … we always think … we are the ones that are touching our patients physically, but they touch us as well, they invite us. (male, < 5 years in practice).

Whilst physicians varied in how they responded to patient-initiated touch, most felt comfortable and regarded it as a natural human interaction, particularly when, for example, a patient touched their arm or gave them a hug of gratitude.

Dimension 2: Expressing empathy

Participants invited touch in response to patients' distress or when breaking bad news because this was a means of expressing empathy and demonstrating understanding:

'We share many intimate and deeply personal moments … touch is a big part of what we do in the consultation and breaking news of all kinds.' (female, 6-10 years in practice).

Touch expressed 'more than words can say' by enabling participants to 'reach out' and 'connect' with patients:

I can't remember whether I handed her a Kleenex or … held her hand … but there was some of that touch aspect of medicine that I think is really critical. (male, > 15 years in practice).

Emotionally-charged encounters, which drew participants in as fellow human beings could be momentary and yet leave strong impressions. In the excerpt below, an emergency doctor described how he told a mother of her daughter's subarachnoid hemorrhage:

Just putting your hand on the shoulder of the Mom who may lose her daughter soon … was one thing I could do besides my words … I don't think there is any way you can deliver this type of news in any heartwarming way……but you can sort of just blunt the impact of it, … just putting yourself in their shoes. (male, 6-10 years in practice).

Within these encounters, communicative touch helped participants share understanding with patients:

Knowing what the other person is feeling, I guess is what it is… I become a bit of a conduit for what they're feeling … (male, > 15 years *in practice*).

This sharing of experience was significant for physicians because it defined their own role within emotionally charged interactions.

It does … make me feel like I can actually … share the experience more than being me and them. I couldn't help but express … my emotion and … understanding … what they were going through … I think that touch was important for me as it was for them. (female, 6-10 years in practice)

In the longer excerpt that follows, the participant described, 'putting aside the armor' (male, > 15 years in practice) of being a doctor, to connect with a patient on a human level. His account of the experience elaborates on touch, not just as a form of skin-to-skin connection, but as an affective, embodied experience, where mind and body are no longer separated.

But associated with all of those stories is (a) really intimate moment … where you realize that somebody is sharing something with you that's really kind of sacred ... and that your job is to just sit there and be quiet and take it in and make sure that kind of the circumstances are acceptable and open, you know. It's almost like you need to lower your defenses, stop being such a damn doctor and be … more of a human being and less of a clinician … being there and being available, taking the time. I don't think it would be possible to do that if you didn't lower your defenses, if you didn't express some touch, if you didn't use the right body language, if you didn't look like you had some time, if you weren't prepared to sit down and leave some space in the conversation and perhaps if you weren't prepared, you know, to reach over and touch somebody on the shoulder when they're telling you a really emotional thing or whatever … it's almost like … you might actually physically touch somebody but there's also that kind of

connectedness which is also a form of touching … it's a touching moment. You were touched by what they had to say.

Discussion

Participants experienced touch as a powerful means of sharing emotions and demonstrating presence. They practiced touch to different degrees and in different ways, influenced by their personal comfort and the context of clinical encounters. They were sensitive about whether and how they touched, attending to the possibility that their behavior might be inappropriate. Touch was particularly associated with emotionally-charged consultations, where it acted as a medium for physicians to connect with patients in a way that transcended words. Their experiences are reminiscent of Van Manen's description of 'pathic touch',[46, 47] related to personal presence, relational perceptiveness and emotional awareness. Participants' accounts of individual 'touching styles' are similar to the experiences of intensive care nurses[18] and family physicians[9] reported in other publications. Touch was influenced by gender and culture, and formative experiences of growing up, relating to other family members, and of experiencing different social contexts. Participants described how they paid attention to patients' nonverbal cues and responded, moment-to-moment. Estabrooks and Morse,[18] who described the same phenomenon, defined attending to cues as 'the process by which, through symbolic interaction with others, one determines the need for and the appropriateness of touch'.

Theoretical implications

Scheler[41, 42, 44, 48] described the responses to patients' facial expressions and gestures, which participants in this study reported, as the most fundamental and direct form of perception. We perceive the other as an 'expressive unity' (an embodied mind). Schutz,[36, 42-44] reminiscent of Buber,[49] elaborates how empathy involves a 'thou-orientation', meaning that one person is bodily present and directed at the living reality

of another without conscious judgment or inference. As participants encountered patients and read bodily cues, they were present in the moment, aware of contextual nuances and open to the patient. Their openness to touching emphasized their own vulnerability within these situations. Two people being thou-orientated creates a 'we-relationship', a shared motivational context where respective streams of consciousness intersect as a form of interpersonal understanding.

Stein's[26, 27] account of three aspects of empathic experience helps interpret participants' experiences of encountering patients as fellow human beings. First, experiences had meaning in participants' perceptions of patients as they recognized and responded to cues. Second, imaginative accounts of experiences, guided by the Other, 'drew them in'; for example, one participant imagined what it was like for the mother of a brain damaged daughter. The participant gave direct, unmediated, and non-inferential empathy, as present here and now. The participant read meaning directly *in the touch*, experienced rather than imagined or inferred, and grasped the experience directly rather than by analogy. Third, experience gave participants a more comprehensive understanding of patients. In keeping with Stein,[26, 27] empathy was how, at the most basic level, doctors came to understand patients as concrete others; it was a particular type of understanding. This approach helps us see all experience as intersubjective, in contrast to individualistic approaches to empathy that differentiate between subjective and objectives experience. Intersubjectivity underscores the inter-relatedness of experience. It directs our focus to 'we' as an essential unit of the doctor-patient relationship.

Pedagogical implications

This was the first time many participants had thought about or discussed touch as a means of communicating with patients, despite this being a tacit aspect of their practice. Although physicians can and do communicate with touch, this is rarely a topic in communication skills curricula. When touch is

discussed in medical school it tends either to be confined to the context of physical examination or as a (negative) boundary issue.[50] This notion of touch as a troublesome, bounded issue is supported by a recent review which examined touch through the lens of threshold theory.[12] An implication of our research is that is that it would be valuable to acknowledge more explicitly the role of touch in medical practice. Promoting targeted reflective practice on touch, as part of instruction on nonverbal communication would be a useful starting point for learners, who are often unsure about the appropriateness (or not) of touch.[51-53] Given the lack of attention to touch in the literature faculty may need support also. Discussions with them could include attention to issues of gender and ethnicity for both physicians and patients. In the clinical setting, faculty could be asked to explain why they do or do not choose to communicate with touch such that students could be made more aware of the tacit decision-making that lies behind nonverbal communication. Integrating communicating with touch with other touch practices such as physical examination[54] and performing procedures can help students focus on touch as both communicative and procedural, rather than one or the other, to emphasize the integrated nature of clinical practice.[55]

Limitations and implications for future research

Phenomenology is a science of 'plausible insight',[56] which aims to give voice to human experience and understand the meanings associated with experience. One potential limitation is that the experiences we analyzed were those of a self-selected group of physicians. It is possible that interviewing other physicians may have given different insights. In particular, few participants reported negative or uncomfortable experiences of touch. This could have reflected their desire to please the interviewers or that they did not feel comfortable enough to disclose such experiences. Alternatively, it could be that our participants were skilled at determining when it is appropriate to touch or not, such that they avoided touch in certain situations. We included two participants who do not patients in the sample so

that negative perspectives were represented in the dataset. We did not ask participants about their experiences of not touching, unless they specifically raised this and this could be a valuable avenue to explore in future research. For example, it is likely that physicians are more cautious communicating with touch with certain patient groups or cultures. We did not interview patients and we do not know, for sure, that physicians reached a 'shared' understanding with them; rather, participants felt that touch brought them closer to understanding patients' experiences. Although we interviewed participants from a range of cultural backgrounds, cultural aspects of touch were not the specific focus of our investigation so these are an avenue for future research. Another possibility is to interview physician-patient dyads and explore in more depth the affordances of intersubjectivity as a lens to examine doctor-patient interactions.

Conclusion

This study shows how physicians communicated emotionally with patients by using touch as an embodied and intersubjective NVCS. These insights indicate the possibility of meaningful experiences of empathy within doctor-patient interactions[42]. Touching, we propose, remains an integral part of being a doctor, to which medical curricula should attend.

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