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Being vulnerable, a qualitative inquiry of physician touch in medical education

Martina Kelly, MBBCh, MA, Lara Nixon, MD, BSc, Tom Rosenal, MD, MSc, Lindsay Crowshoe MD, Adrian Harvey MD, M.Ed, M.Sc, Wendy Tink MD, Tim Dornan, MD, PhD

Martina Kelly is associate professor, Department of Family Medicine, Cumming School of Medicine, University of Calgary, Alberta, Canada. ORCHID: http://orcid.org/0000-0002-8763-709

Lara Nixon is assistant professor, Department of Family Medicine, Cumming School of Medicine, University of Calgary, Alberta, Canada.

Tom Rosenal is associate professor Emeritus Department of Critical Care Medicine, Cumming School of Medicine, University of Calgary, Alberta, Canada.

Lindsay Crowshoe is associate professor, Department of Family Medicine, Cumming School of Medicine, University of Calgary, Alberta, Canada.

Adrian Harvey is a clinical associate professor, Departments of Surgery & Oncology, Cumming School of Medicine, University of Calgary, Alberta, Canada.

Wendy Tink is assistant professor, Department of Family Medicine, Cumming School of Medicine, University of Calgary, Alberta, Canada.

Tim Dornan is Professor of Medical Education, Queen's University Belfast, Belfast, Northern Ireland and Maastricht University, the Netherlands. ORCHID: https://orcid.org/0000-0001-7830-0183

Corresponding author: Martina Kelly, Dept of Family Medicine, G329 Undergraduate Family Medicine, Cumming School of Medicine, 3330 Hospital Drive, Calgary T2N 2N1, Alberta, Canada. 00 1 403 210 6318 makelly@ucalgary.ca @YYCkelly

Key-words

Nonverbal communication, touch, interpretation, collaborative inquiry, phenomenology, phronesis, risk, medical education

Word count

3453

Abstract

Purpose

Effective nonverbal communication is associated with empathic behavior and improved patient outcomes. Touch, as a form of non-verbal communication is relatively unexplored in medical education. This study sought to gain in-depth insights into physicians' experiences communicating with touch and to examine how this could inform communication skills curricula.

Method

Collaborative inquiry, a form of action research, was used. Six experienced physician educators from the University of Calgary met eight times between 2015-2018 to critically reflect on their experiences of touch in clinical practice, teaching and learning. Data comprised meeting transcripts, individual narrative accounts and digital recordings of role-plays. Interpretative phenomenology, the study of lived experience, guided analysis.

Results

Two themes were identified – touch as presence and touch as risk. Participants engaged with touch to demonstrate presence and a shared humanity with patients, to express 'being with' a patient. Risk was not associated with the physical experience of touch but its social meaning, interpreted through gender, culture, relationships and context. Individual experiences were open to many interpretations. Participants expressed tension between their personal experience communicating with touch to express empathy and formal curricular structures. Reflection, role-modelling and clinical debriefs were suggested as ways to encourage situational awareness and sensitive use of touch.

Conclusions

Touch is a powerful means to communicate with patients but is highly subjective. Rather than avoiding touch for fear of misinterpretation, promoting dialogue about its complexity could promote a more balanced understanding of touch and its potential to convey empathy as well as more effectively manage risk.

Word count: 250

Introduction

Nonverbal communication (NVC) is an umbrella term for communication without linguistic content[1,2] such as facial expressivity (smiling and head nodding), postural positioning (open or closed body posture, use of interpersonal space), and gesturing (hand movements or touch). An estimated two thirds of all human communication is non-verbal.[1] NVC skills are important for health professionals because empathic behavior - the exchange of affective information, signaling interpersonal orientations (attention, sympathy), and recognizing physiological states (pain) - is non-verbally mediated.[1,3] Good NVC improves patients' satisfaction, adherence to treatment regimens, and uptake of health services.[4]

Touch is a significant form of NVC for health professionals given its role in daily interactions. It is necessary, but has largely been overlooked as a form of communication by the medical profession.[5] 'Procedural touch' is core to physical examination and practical procedures. 'Communicative touch' can be precarious because, despite mediating empathic communication, it is often portrayed in terms of potential professional misconduct and risk to patients and professionals.[6] Whilst there is extensive nursing research on touch, only four qualitative articles have been devoted specifically to medical touch.[5,7-9] Medical education has focused more on verbal than NVCS.[10,11 12 13] Only six of the 71 components of the widely-used and evidence-based Calgary-Cambridge Guide to communication education relate to NVC.[14,15] The limited research that has examined how to enhance medical students' non-verbal capabilities has concentrated on posture, eye contact, and reading patients' facial expressions, with less attention to touch.[10,11 12 13]

The lack of attention to communicative touch reflects wider changes in medical practice. The 'laying on of hands', once emblematic of medicine, is being replaced by a hands-off style of practice that relies on technology.[16,17] This leaves learners across the healthcare professions unsure whether and how to communicate with touch.[18,19] It is not easy to guide them because something as simple as a handshake can be interpreted in different ways depending on the strength and duration of the physician's grip and who initiated the handshake. Culture[20] and context add further layers of complexity. Doctors and educators need to draw on a balanced appraisal, which allows patients to benefit from touch whilst preventing them from being harmed.

The contextually-sensitive balance between risk and benefit associated with touch requires researchers to represent this complexity well,[21] and seek new sources of evidence. Practicing doctors actively balance that risk, in-context, every working day so their 'wisdom of practice'[22] (phronesis) is an appealing source of information. A methodology that is little used in medical education research, co-operative inquiry,[24,25] makes it possible to harvest experiential evidence rigorously, while also focusing on practical outcomes, which led us to frame the research question. This research aimed to enrich educational conversations about touch in clinical practice by initiating and evaluating a dialogue among physician-educators about their experiences of touch in day-to-day clinical practice. Our research question was 'How do physicians experience communicative touch in clinical practice?

Method

Ethics

This study received ethics approval from the Conjoint Health Research Ethics Board, University of Calgary. All authors, as researcher-participants, consented to their personal experiences being reported.

Study design and theoretical orientation

This study used an action research[26] methodology called co-operative inquiry (CI),[24,25,27] in which researchers access practice-relevant, experiential knowledge by being participants in their own research. In a series of cycles of action and reflection, six faculty members cooperatively refined the research question, agreed how to collect and analyze data, and formulated conclusions. The starting point for CI is participants' experiences but, as the inquiry progressed, written evidence and theory informed our investigation.[24] We chose interpretative phenomenology,[28] the study of lived experience, to help us explore taken-for-granted tacit experiences.

Setting

Undergraduate medical school, Canada.

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Participants

MK started the study with an 'initiator's call'.[24,29] A medical school administrator sent an email outlining the study to teaching faculty. Seven faculty responded, whom MK met individually to discuss the study. We then met as a group to develop the research question, consider CI as a methodological approach, and discuss ethical issues such as confidentiality. One participant

withdrew at the second meeting due to scheduling difficulty. The final group had six members. Table 1 provides participant details and reasons for entering the study.

TABLE 1 ABOUT HERE

Data collection

Eight meetings lasting 1-2.5 hours took place between April 2015 and October 2018. These were audio-recorded and transcribed. The action phase consisted of participant-researchers drawing on their personal experiences and generating data by writing accounts of touch[30], reviewing medical school websites, conducting informal individual interviews with colleagues about teaching touch and, stimulated by a member's narrative, re-enacting, role-playing and video-recording a teaching encounter. The reflection phase consisted of discussing the data. Our final dataset consisted of meeting transcripts (16.5 hours), narrative accounts (10 written stories), digital recordings of role-play (2 hours) and participant emails between meetings. (Table 2) To make meetings a safe space for frank exchange, the group set ground rules, which included maintaining confidentiality and probing each other's narratives and perspectives in order to deepen group reflexivity.[31,32] TD, an experienced qualitative medical education researcher, acted as a critical colleague by appraising the evolving interpretation.

TABLE 2 ABOUT HERE

Data analysis

All authors participated in iterative phases of data immersion, open coding, creation of categories, and thematic synthesis.[33,34] A particular feature of interpretative phenomenology is diligent attention to researcher positionality[35] - no interpretation is objective or neutral, but meaning is always understood through our culture, prior experience, language, time in history and our own engagement with the world.[36] In terms of applied phenomenology, this requires researchers to question their 'foreknowledge' or 'pre-understandings' by exploring how their interpretations are informed by these lens'. This process is termed 'engaging with a hermeneutic circle'.[28,36] In this study, dialogue among team members helped us gain a deeper understanding of how our individual perceptions gave different insights into the phenomenon of touch in clinical practice.

Findings

Two overarching dimensions of touch were identified; touch as presence and touch as risk. Participants had individual 'styles' in relation to their personal routines, intentions and practices of touch which were highly contextual making explicit instruction on touch challenging. For brevity, the text expresses participants' experiential knowledge using phrases such as 'Touch was ..' as shorthand for 'Participants experienced touch as …'. We have written the narrative in past tense to avoid unwarranted claims to generalizability.

In keeping with an interpretative phenomenological approach, quotes are not allocated to a single participant, as the focus of our inquiry was on the phenomena of touch in clinical practice, teaching and learning, rather than our stories as individuals.[28,37]

Touch was presence

Touch allowed physicians to acknowledge patients' vulnerability during illness. By touching patients, participants were 'present' with patients. Touching was part of physicians' humanity, forming connections between them and patients.

> The act of touching another person is to remind yourself that you are a human and that they are a human and that we are connecting.

Physical contact helped participants demonstrate 'being there'. Physicians acknowledged patients' suffering by means of gestures that might be momentary and spontaneous:

> I think many of us touch patients quite innocently, without even being conscious of it half the time.

Participants expressed compassion by holding an anxious patient's hand before anesthesia, comforting a distressed patient by patting their arm, or performing a physical examination that was no longer required for diagnostic purposes:

> We went through the same ritual and she seemed quite reassured, confident and thankful. But when I suggested we didn't need to do it anymore she was concerned and stated a preference for annual thyroid exams. I have never thought of the thyroid exam as caring or compassionate.

A physician might hold the hand of a sedated or unconscious patient for several reasons:

> To reassure the patient; to remind myself and others that we were with a patient, not a collection of organs; to medically assess the patient for various conditions revealed by the hands; (and) to address the tension between the human and the technical.

Acknowledging the relational nature of diagnostic touch could make patient care more humanistic:

> I think it would be quite easy for a physical examination course to cover how you feel for a liver, but never get to the level of linking to 'how does the patient feel?' that's simply being touched by a human being.

Sometimes, direct physical touch was not needed but connection was mediated through objects; participants described 'touch[ing] through technology, whether that's a stethoscope or something else'. They might 'touch' patients by proxy, for example, 'touching the patient via the monitor'.

Touch was risk

Variable interpretations of touch opened participants to being vulnerable. Many factors – including gender, ethnicity and age – influenced participants' experiences of touch such that any single physical interaction could be interpreted in many different ways. What was 'safe' for one practitioner, was interpreted as 'risk' by another. Appendix 1 1 illustrates collaborative inquiry methodology at work, leading to the finding that physicians' experiences of touch are configured dynamically and dialogically by an interplay between their culture, gender, personal experience and the moment as it presented. In the incident descibed, a female participant moved a lock of hair on a distressed female patient experiencing delirium. The woman was of First Nations'

origin. This simple gesture, initiated spontaneously, sparked debate within our group. Male participants remarked they would never initiate such a potentially intimate gesture, in particular, touching a female patient on her face due to the risk of misinterpretation. The physician who initiated the touch, reflected on her assumptions as a female physician and the privilege she assumed when interacting with other female patients. Another participant advised that touch in First Nations patients is particularly sensitive due to a long history of colonial abuse, but the female physician had not thought of touch through this cultural lens, nor the power she had to initiate touch for a confused, vulnerable woman. Another member, caring for an elderly aunt, observed that the act risked infantilizing the woman, and treating her like a child.The decision to touch or not to touch was often a combined interpretation of physician factors, patient factors and context, indicating individual physicians' situational awareness. This is demonstrated in the following example:

> 'As the visit concluded, I held my hand out to shake farewell. The patient shook my hand firmly and then said, "oh come now…this calls for a hug" and pulled in for one. I was slow in reacting. While the hug was slowly unfolding, I was not sure what to do. I felt like resisting but was caught off guard. The hug that I attempted was the football congratulatory variety but the patient seemed to hold longer than I expected. I searched my memory for different hugs I have had in my experiences with family and community. I tried to give a 'manly' hug that I would have done on the football field after a great hit or a goal. That hug usually was quite brief with a strong pat on the back. But this hug was longer than I expected, it felt too intimate and I think that is what made me uncomfortable.'

The physician's physical experience and the relational nature of his touching changed when what began as a formal handshake became a hug. The hug infringed upon the physician's personal space. Lived time was prolonged. A fleeting, 'in-the moment' experience stimulated the physician to reconsider his relationship with the patient. Touch was experienced beyond physical contact through time, space and relationships. Such experience intersected with social constructs such as gender, culture and power. This story led to discussion about how the interaction might vary depending on gender: for example, male-male, male-female, female-female interactions. It also led us to reflect on power, and assumptions of privelege, in relation to who initiates touch – the patient or the physician.

Learning to touch

Participants struggled to recall how they learned to touch. Awkward, negative examples of how *not* to touch, or what not to touch were more common:

> 'I think problematic learning events surrounded touch. I'm thinking of a central line that was done by a preceptor in front of us, the patient was writhing in pain'

During the process of the CI, participants realized that they rarely explicitly addressed touch within their own teaching and were wary of appearing unprofessional to students should a patient initiate touch, for example expressing gratitude with a hug. A tension existed between the interpersonal and contextual nature of touch in practice (its '*fuzziness'*) and the constraints of developing a formal curriculum. Participants expressed concern at trying to reduce the experience of touch to something simple, such as listed out within a learning objective, or evaluated as part of a standardized patient interaction.

> ‘I’d hate to just narrow this down into something that’s too simple … because this is more beautiful and bigger than that, and it would be a shame to just whittle it down to … a checkbox of physicians and students’.
>
> “it’s fragmenting it in an artificial way, that we don’t actually perfect or perform”

But at the same time, all were aware of the risks of inappropriate touch:

> ‘we need to be careful without opening the door (we’ve all heard of lawsuits of inappropriate touch), so maybe it could be a hidden objective....maybe under the umbrella of empathy’.

Role-modeling and reflective practice offered practical ways for students and residents to learn to touch. In providing a safe learning environment, learners could be given permission to wonder, question, and adjust their approaches while considering the dymanic way touch might be adopted and adapted in clinical practice.

> ‘giving them permission – this might not work for you...Trying to be mindful of role modeling, as we are adjusting our practice and our own boundaries according to patients, and being, ever mindful in watching for that ever moving line’.

Discussion

Touch communicated presence, connection, and relationship. Physician participants touched patients to show they ‘were there’ and to reassure patients. The straightforward definition of touch ‘coming into or being in contact with’, emphasizes its physical nature. According to this inquiry, touch was more complex, supportive of the 14 other dictionary definitions of touch

which emphasize its more metaphysical dimensions, expressed in day-to-day expressions such as 'a touching story' or 'a touchy subject'. Touch was experienced as multidimensional and socially negotiated. Accordingly, doctors interpreted it differently, demonstrating a finely tuned, individually positioned, situational awareness, which included awareness of their own power and vulnerability, as well as that of patients

Theoretical pedagogical implications

In moments of touch, physician participants were open to sharing their own humanity with their patients.[38] They considered the balance of power and vulnerability in relation to that of their patient on a case by case basis. Touch 'was so much more than touch'.[16] We draw upon the idea of 'mitsein'[39] (being with) to describe how participants engaged in moments of touch to ground the doctor and the patient in the moment of their mutual existence. Contemporary medicine tends to prioritize doing; professional competency is enshrined in performance based assessment – shows how, does.[40] Yet, traditionally, medicine is also about being; healing involves bearing witness to the gamut of human experience - helplessness, confusion, suffering, and sometimes, joy. In phenomenological philosophy, 'Being' refers to the interconnectedness of man and world, in a given moment of time, when the present moment is a nexus between past and future.[39] Gadamer described understanding as – 'the measure of our openness to the other'.[41] Touch became the merging of many perspectives (cultural, gendered) in a moment of time, constituting a unique understanding. Elkiss and Jerome, in their analysis of osteopathic touch, describe how the moment of touch 'creates' the patient-physician dyad, in a way that is 'greater than the sum of the individual parts'.[42] Touch was described by our participants as a form of nonverbal 'dialogue', 'a silent language'[7] within a temporal and situated context. The multidimensional

nature of touch, as experienced through time, place, the physical body, relationships and space, was interpreted through intersecting individual participant characteristics such as gender and ethnicity. The idiosyncratic variability of touch experiences suggest that sensitive use of touch, conceived as multifaceted, is an act of phronesis, that is, enacting touch requires a level of practical wisdom. Practical wisdom is characterized by Aristotle as a kind of knowledge of how to act in situation that cannot be judged by applying algorithms (rules of action), but rather only by thoroughly understanding the concrete situation at hand and judging what to aim for in each *particular* case**.** In the clinical setting it may be thought of as 'an awareness appropriate to a particular situation, in which diagnosis, treatment, dialogue and the participation of the patient all come together'.[43]

Practical pedagogical implications

Our data indicate that touch, in the swampy lowlands of practice, is messy, and 'multilogical'. One way to broaden the conversation on touch in clinical practice would be to pose multilogical problems,[44] which encourage learners to consider topics from multiple points of view and cultivate critical thinking and higher order learning. For our participants, this was the first time, as physicians they had the opportunity to reflect on touch, something the group found beneficial. One simple strategy to raise awareness of touch would be to include discussion groups as part of communication skills training, where students are encouraged to reflect and share their personal perspectives on touch. The Johari window,[47] for example, by examining the topic of touch through four 'panes' – open, hidden, blind and unknown - could help students understand relationships between themselves and others. Another option would be to analyze nonverbal communication, including touch, in recorded consultations. In this way students and faculty

could dwell in the subjectivity of touch and reflect on their individual 'styles'[48] of touch. Playing on the word prejudice, Gadamer suggests that *awareness of* things that influence us informs our pre-judgements rather than allowing these to distort truth and be narrow portals that funnel thinking. Recognizing and exploring our attitudes makes us curious and opens us to new conversations. An important caveat is that the purpose of educational discussions is not to generate heuristics of behavior, but rather to educate for situational awareness[49] and develop a praxis based on alert consciousness of self and other. Later, as students advance into clinical practice, continuing these conversations would allow them to adapt their basic communication skills to the dynamic reality of clinical practice as flexible dialogue.[36] In keeping with the suggestion of Wearn et al[45] that touch is a threshold theory[46], this pedagogical space would allow teachers and learners to acknowledge the troublesome nature of touch, and progress from avoiding the topic to clarifying and exploring how boundaries are established and breached[51].

Limitations

This study set out to advance touch as a topic of conversation and inquiry in medical education. Our findings are limited to our personal experiences, as expressed in conversations by members of a small group. Although it was a convenience sample, our group was diverse and members came from a range of different backgrounds. It would be beneficial for investigators to recruit even more culturally diverse participants, drawing in non-Western viewpoints and experiences. To date, although culture is recognized as an important dimension of non-verbal communication, empirical studies on touch and culture are relatively few in clinical medicine, indicating the need for future research.[6,20] Like most qualitative research, our findings are not generalizable beyond

our participants and are embedded within context. As part of our analysis we have presented at conferences and were encouraged by attendees' responses, which showed that our finding resonated with at least some doctors' experiences. We offer our findings as evidence that a conversation with physicians about touch is worth continuing. This study did not explore patients' perspectives. Previous research has shown that patients, whilst aware of risk, appreciate being touched by physicians.[7,52] Future work, could include gathering experiential accounts from patients or engaging patients in a collaborative inquiry like ours.

Conclusion

Touch plays a significant if relatively tacit part in daily physician practice. It provides a non-verbal means to communicate empathic presence and connection between physician and patient. While touch is associated with caring, communicative touch has, of late, been subsumed into conversations about impropriety and risk. This tends to represent touch as a unidimensional phenomenon rather than an intricate interaction, which is highly individual and complex, ; located at the intersection between gender and culture of both giver and receiver. Ironically, propriety, veiled as professionalism, may trump human compassion and deny patients simple acts of care when they are most vulnerable and would appreciate them most. A more holistic representation of touch acknowledges this complexity, with benefits as well as risks, and creates opportunities for recognition of and discussion about embodied experience. This, we suggest, could promote more sensitive touch in clinical practice, from which both physicians and patients could benefit.

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Other disclosures (potential conflicts of interest)

None

Ethical approval

This study received ethics approval from the Conjoint Health Research Ethics Board, University of Calgary.

Disclaimer

None

Previous presentations

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Table 1: Participants

Name	Gender	Clinical specialty	Teaching role	Reason for joining the study
Martina	Woman	Family medicine	Director, undergraduate family medicine.	Clinical encounter – being hugged by a patient, then criticized by colleague for reciprocating and discussing
Lara	Woman	Family medicine (elderly)	Teaching faculty for professionalism and communication skills courses, medical student mentor.	Working mostly with older isolated adults was curious to understand more about role of touch in her clinical practice, but also that of colleagues
Wendy	Woman	Family medicine	Course lead for early clinical placements in family medicine	Concerned about prioritization of guidelines over relationships
Tom	Man	Critical care	Retired residency program director in critical care medicine	Interested to reflect on his experience as a critical care doctor; he had mostly touched unconscious patients
Lindsay	Man	Family medicine	Curriculum lead, Indigenous health medical education.	Interested in cultural aspects of touch and nonverbal

				communication, particularly as relate to Aboriginal experiences
Adrian	Man	Surgery	Director, Faculty Development. Director, Surgery Clerkship	Not something he had given much thought to but recognized that teaching and practice in surgery necessarily includes touch

Table 2: Summary of meetings, phases of action and reflection

	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Meeting 6	Meeting 7	Meeting 8
Action	Brainstorming the topic	Listening and discussing stories (1-3)	More listening and discussing stories (4-6)	Taking stock - revisiting touch	Discussing findings from internet review and interviews	Sharing teaching moments and deciding to role-play	Discussing role-play and teaching	Reading initial draft of results
Examples of topics discussed	Touch: concrete and obvious or something more? Handshakes	What is touch? Relational Trust	Touch as Reassurance, Risk Power	Going in circles. Hard to get a grip on touch	Important not to constrain teaching – influence of the		Teaching strategies- (Role-modelling Forum theatre	Discussing findings and implications

	Hugs			Negative learning experiences -how is touch taught in our school and other ones?	organisation		Johari window) Organisational rules	
Action arising	Write about an experience of touch			Website review Informal interviews with educational leaders and learners	Write a teaching or learning moment about touch with a learner	Role-play of written account	Time to put what we have together	Review and discus-ion of draft paper